

©2008

Paul J. Benzon

ALL RIGHTS RESERVED

THE LANGUAGE OF INFORMATION: INTERMEDIA
APPROPRIATION AND CONTEMPORARY LITERARY FORM

by

PAUL J. BENZON

A Dissertation submitted to the
Graduate School-New Brunswick
Rutgers, The State University of New Jersey
in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Graduate Program in Literatures in English

written under the direction of

Richard Dienst

and approved by

New Brunswick, New Jersey

October, 2008

ABSTRACT OF THE DISSERTATION

THE LANGUAGE OF INFORMATION: INTERMEDIA

APPROPRIATION AND CONTEMPORARY LITERARY FORM

by PAUL J. BENZON

Dissertation Director:

Richard Dienst

My dissertation examines contemporary literature's politically and aesthetically dynamic engagement with media technology. I argue that print literature intervenes within the media landscape most vitally in its appropriation of technological form through the radicalization of literary form. Rather than reading literature's relationship to technology along narrative or thematic lines, I show how a series of novels and poetic sequences by Andy Warhol, Don DeLillo, Kevin Young, and Hari Kunzru reconfigure the operations of the typewriter, film, vinyl records, and digital networks through experiments with form, language, and genre. Tracing aesthetic processes across media technologies and print literature, I show how contemporary authors use literary form to incorporate and redirect media effects in a manner that suggests political possibilities beyond simple concession, withdrawal, or resistance.

In my first chapter, I argue that the standardized interface of the typewriter keyboard produces an aesthetics of error and uncertainty rather than one of discipline. I then trace this aesthetics through Warhol's *a: a novel*, showing how Warhol exploits the

textual irregularities produced by the typewriter to test its limits as a transcriptive writing machine. Chapter two takes up literature's response to the material instability of the celluloid film archive and the emergence of electronic visual imagery. Focusing on the plot device of the missing film in DeLillo's *Running Dog*, I explore how the novel responds to the pressures of media change through the materially charged practices of appropriation and reproduction. Chapter three considers literature as a storage medium alongside the LP record and the painted canvas. I show how Young's poetic sequence *To Repel Ghosts: Five Sides in B Minor* foregrounds distortion between media as a means of reflecting on literature's capacities for storing, modifying, and circulating information. In my final chapter, I consider literature's engagement with digital technology and global networking. I argue that Kunzru's formal innovations in *Transmission* break from conventional conceptions of the internet as a transparent, open structure to evoke the often invisible and unreadable operations of global data circulation. My dissertation argues that contemporary writers engage technological mediation most urgently through literary form, and that these engagements make clear the integral importance of media technology to contemporary literary production in general.

Acknowledgement

Each of the four readers who have spent time with this project over the past nearly four years has left his or her own unique mark on its shape. Richard Dienst has been a shaping force on my thinking since the beginning of my graduate education. Through his constantly provocative queries, objections, and reversals, he has taught me both the importance of surprising myself and the critical virtues of anomaly and contingency. Brent Edwards generously agreed to work with me sight unseen, halfway through my graduate career. Throughout the course of this project, he has modeled for my thinking a theoretical rigor that is as sensitive as it is ambitious. John McClure has consistently tested the ethical horizons of this project against his own strong commitments, and has helped me to rein in many oversized claims here for the greater good of my argument. Nicole Fleetwood has challenged me to rethink many of the underlying assumptions that govern this project in order to situate it within a broader, more meaningful field of thought.

Many other people have shaped this project as well, in ways that are no less important for being less tangible. Although it seems impossible to list them all or to thank them enough, I want to single out some who have been particularly meaningful to me over the last four years. I have had the luck to write this dissertation under the tenures of Meredith McGill and Marianne DeKoven as Directors of Graduate Studies in the Rutgers University Department of English. Through their intellectual, material, and personal generosity, they have both shaped and aided this work immeasurably. Each of them is, in her own way, a model of progressive and productive support for graduate work in the humanities. Alongside them, Cheryl Robinson, Eileen Faherty, and Courtney Borack

have steered me through many institutional pitfalls, and have looked after me with kindness and care.

Over the course of working on this project, I have been lucky enough to spend time with friends and colleagues inside, outside, and around the academy, all of whom have touched and supported me in ways too numerous to count: Cornelius Collins, Rachel Smith, Sean Grattan, Peter Mickulas, Mary Gilbert, Meghan and Phil Pirri, Shamim Taherzadeh, Johanna Jochumsdottir, and Eric and Sarah (Cooper) Anderson have all enriched my writing and thinking, but also my life outside this dissertation.

My mother- and father-in-law, Debby Sweeney Wick and Phil Wick, and my siblings-in-law Kate, Ann, and Chris Sweeney, have each supported me and my work on this dissertation in their own ways, whether it be taking care of my girl(s), taking care of me, listening to my rants, or providing me a place to stay.

My parents, Florence and Jay Benzon, always encouraged me to read and think about whatever my interests and passions led me towards, even (and perhaps especially) when those interests and passions included the back of the cereal box or the billboards in the subway station. That faith and support underlies this project in more ways than one.

Elizabeth turned one the week before I began this project and turned five two weeks before I defended it; I have often reflected on my progress (and sometimes my lack thereof) by marking it against her unstoppable growth. I feel lucky that I have been able to share in so much of that growth, and lucky that she includes me in both her work and her play.

Above all I thank Sarah, who has joined me in the adventure of sharing life with a fellow academic; who has always known exactly what to say and what not to say, about

my work on this dissertation and just about everything else; and who has blessed me and bettered me with the gifts of love, support, belief, time, forgiveness, and optimism, often when I least deserved them and most needed them. To say I could not have done this without her would be an understatement; beyond that, I would not be nearly who or what I am.

Portions of Chapter one will appear in slightly different form in the January 2010 volume of *PMLA*.

Table of Contents

Abstract	ii
Acknowledgement	iv
Introduction	1
Sketching the Black Box	
Chapter One	32
Lost in Transcription: Postwar Typewriting Culture, Andy Warhol's Bad Book, and the Standardization of Error	
Chapter Two	101
Text Turns the Image Over: Cinematic Materiality and Reproductive Writing in Don DeLillo's <i>Running Dog</i>	
Chapter Three	146
Writing Between the Intergeneric and the Intermedia: Kevin Young's <i>To Repel Ghosts</i> and the Analog Aesthetics of the Turntable	
Chapter Four	205
Towards a Language of Digital Materiality: Circulation and Literary Form in Hari Kunzru's <i>Transmission</i>	
Coda	259
Playing Back Nietzsche's Laundry List: Digital Print Literature	
Bibliography	266
Curriculum Vitae	277

Sketching the Black Box

“Media” still refers to information, communication, and black boxes, not to pure mediation straight into the body. Media, almost by definition, are about filters, switches, technical limitations, silly simulations, and heartless representations.

—Geert Lovink, *Dark Fiber*

Planned Obsolescence: How The Novel Writes Media History

This dissertation, like any critical intellectual engagement with modern and contemporary media technology, is a project hedged against its own media-historical obsolescence, an attempt to map the uneven and constantly shifting landscape of media technologies from within. As a result, its claims and arguments take shape, whether explicitly or implicitly, across the connections, disjunctures, and transformations that define this landscape. I originally conceptualized this project as a study of contemporary literature’s engagement with the aesthetics of the remix, a process involving the production of a technologically manipulated alternate version of a song or other cultural artifact, amalgamated from discontinuous and heterogeneous pre-existing source material. When I began this project in early 2005, the concept of the remix had only recently begun to emerge from the domains of hip-hop and dance music to visibility in the broader sphere of mainstream culture. As of this writing in 2008, the video website YouTube (which itself did not even exist in early 2005), lists literally “millions” of remix videos (YouTube). Neither YouTube nor remixing makes a substantive appearance in this dissertation, and indeed, I could have raised any number of other similarly rapid changes here as markers of the ways in which the technocultural landscape has transformed in the immediate past—the economic decline of the recording industry and the widespread emergence of digital filesharing, for example, or the emergence of blogs as a widely

consumed source of information, or the rise of social networking websites as a new technological formation of the public sphere. Each of these changes throws into relief the ways in which different individuals and populations use technology to produce and consume information, and each brings with it its own narratives of progress and decline, of innovation and obsolescence. Situated within and against this rapidly shifting technocultural terrain, a dissertation on how the contemporary print novel utilizes and responds to typewriters, celluloid film, long-playing records, and computer viruses might seem multiply, redundantly obsolete.

Yet the most complex and salient dimension of these technological changes, and indeed of all those changes that have surrounded the writing of this dissertation, is not their sheer rapidity but rather their unevenness: the uncanny, overdetermined ways in which blogs both reproduce and depart from the material constraints of print periodicals, or in which filesharing both feeds off of corporate media and disseminates its productions in new forms and into new audiences. These uneven shifts attest to the larger reality that neither media history nor the critical relations that surround it fit together as a smooth or continuous trajectory. On the contrary, these vectors operate disjunctively and inexactly, revealing difference and decay through the various combinations and relations of apparatuses that crystallize along their paths. Thus both in spite of and because of the ways in which recent changes in media technology have dramatically transformed the production, circulation, and consumption of meaning, this dissertation does not focus solely on technological change in the immediate present, as if attempting to read the isolated contents of some sort of imaginary media-historical vacuum. Nor does it trace a

longer history of change or the lack thereof, as if attempting to write a narrative of contemporary media as constantly continuous or progressive.

I focus instead on a series of idiosyncratic textual appropriations of the operating procedures of various media technologies within a series of contemporary print texts, and often more specifically on appropriations that reveal operational and aesthetic discontinuities between print literature and the other media forms I discuss. In looking at the formal transactions between these novels and the media technologies they engage, I focus on this disjuncture as a central and constitutive dynamic of their relationship. In this sense, disjuncture serves as synecdochal of the larger media history that these authors write and write within, but also, more locally, as a multi-faceted critical apparatus for intervening within that history. The complex and dissonant commensurability between the ways in which printed characters configure meaning and the ways in which the operating units of various other media technologies do so provides the authors I discuss with both leverage for critical investigation of those technologies and space for the imaginative and speculative representation, appropriation, and approximation of those technologies. For these authors, representing the operations of media technology, and thus writing the uneven, often opaque relations between print textuality and these other technologies, is a way of claiming the novel's own place as a media technology with its own rules of inscription while also claiming critical distance in the interest of cooperation, synthesis, and interchange rather than of resistance, separation, or straightforward critique. Their textual engagement with various technologies is paradoxically at once both direct in its appropriation of their operating protocols and also orthogonal in its predication upon the ways in which that directness necessarily undoes

itself, leaving behind gaps, overlaps, surpluses, and deficits of material textual information as evidence of an uneven, yet interdependent negotiation between different writing systems. Indeed, these authors present the possibility of considering the novel itself as a writing system, a technologically produced means of recording, storing, reproducing, and transmitting information, characterized by a specific yet malleable set of formal properties. Thus rather than staging negotiations with other writing systems solely thematically, at the abstracted level of culture at large, each of the novelists I discuss focuses on particular media technologies as systems designed to produce particular material units of information that trouble the conventional conditions of novelistic textuality and narrativity: in *a* (1968), for example, Andy Warhol utilizes the mechanics of the typewriter and the protocols of the corporate typing pool to produce an unreadable novel whose errors and irregularities mark how the system of the typewriter distributes and configures bodies through the collaborative production of text. Don DeLillo's *Running Dog* (1978) uses the plot device of the missing film as a point of departure for addressing issues of cinematic materiality, decay, and the politics of media change through a series of narrative breaks that appropriate cinematic form. Kevin Young presents *To Repel Ghosts: Five Sides in B Minor* (2001) as an imaginary set of vinyl LP records in order to thematize the uneven, complex commensurabilities across the novel, the record, the painting, and the computer as different forms of media storage. In *Transmission* (2004), Hari Kunzru imagines the figure of the computer virus as a technological structure that at once disrupts both the novel's narrative order and its formal processes of meaning production in order to offer a textual evocation of the often invisible and unreadable operations of global data circulation.

In seizing on discrete moments of interdependent inexactitude between print literary discourse and media information, then, these novels contribute to the writing of a media history that is not only partial in the way that all histories must necessarily be, but also localized, incidental, and microscopic in a fashion that stubbornly resists reduction or transposition. The formal experimentations that these novelists employ to respond to the operations of media technology provide hints of a larger cultural, historical, and technological complex that can be imaginatively conceptualized and extrapolated towards, but never fully envisioned or transformed, either within the pages of the novel or elsewhere. If, in Walter Benjamin's well-known formulation, "[t]he true picture of the past flits by" and "can be seized only as an image which flashes up at the instant when it can be recognized and is never seen again" ("Theses" 255), the authors I discuss here attempt to capture that instant of recognition as it occurs within media technology and media history. Through their formal attention to the particularities of different media systems, they suggest that for contemporary cultural criticism, the momentary flashes Benjamin describes take place in the microscopic mechanics of the writing machines of the late twentieth and early twenty-first centuries.

From Mediated Imagination to Imaginary Mediation: An Uneven History of the Media Novel

These flashes have come into view equally rarely thus far both in the history of contemporary novels that engage media technology—a group of texts that I subsequently refer to as media novels—and in the history of critical approaches to that body of literary work. Both of these genealogies predominantly imagine literary production in opposition

to media technology, focusing on an aesthetic, psychological, and ideological antagonism that is generally deployed in defense of literary and the humanist subjectivity that it represents within these texts, positioned to keep them at a distance from technology. These texts take as axiomatic that the ideal position for literary production is outside of technology, whether that outside position be one of parallel observation, hierarchically superior critique and resistance, or hierarchically inferior witness and elegy. While none of these positions is assuredly attainable within the post-World-War-II media landscape, they are all marked by a concern that literature remain distinct from the other media forms that saturate that landscape, privileging its status as a conduit for consciousness and thematic inquiry.

Critical considerations of the media novel demonstrate a broad consensus on the genealogy of the form. As constituted by much of the scholarly work to date on the form, the media novel finds its origins in the cut-up, fold-in techniques of William S. Burroughs' *Nova Express* trilogy, runs through the late modern and postmodern novels of Thomas Pynchon, occasionally makes detours through the work of Joseph McElroy and John Barth, and finds its apex in the work of Don DeLillo (most frequently in mid-to-late-career novels including *White Noise*, *Mao II*, and *Underworld*) and the emergence of cyberpunk science fiction (generally represented by the early work of William Gibson). These novels inarguably constitute a crucial lineage for understanding the ways in which literary production makes sense of information technology in the second half of the twentieth century, and they serve in various instances as intertexts, inspirations, and antecedents for the novels I discuss in this dissertation; one of the abovementioned authors, DeLillo, is even the central figure of one chapter in this dissertation. However,

these novels engage media most often precisely along lines that seek to resist it, or to mourn the loss—of literacy, of agency, of human subjectivity itself—that they see as inevitably catalyzed by it. Pynchon’s *The Crying of Lot 49* (1966), for example, opens by comparing Southern California to the weighted, yet “hieroglyphic” (14) unreadability of a circuit board and closes with an elegy for the “middles” (150) of epistemological openness that Pynchon sees as lost within the constrictive, technologized landscape of “America coded” (149): “[H]ow had it ever happened here, with the chances once so good for diversity? For it was now like walking among matrices of a great digital computer, the zeroes and ones twinned above” (150). As a number of critics have noted, Pynchon imagines *Gravity’s Rainbow* (1973) as itself a film, employing a prototypical strategy of imaginary mediation that prefigures several of the works I focus on, albeit to ends that are markedly less sanguine or open-minded about the implications of media technology’s saturation of contemporary cultural experience.¹ The “film we have not learned to see” projected on the “darkening and awful expanse of [movie] screen” (775) that occupies the novel’s final moments is the culmination of the paranoid history that has come before it, but also the culmination of that history *as a film*, an inhuman text seemingly inaccessible to human intervention. While Gibson’s *Neuromancer* closes with a more open-ended conception of critical intervention, its doing so is predicated upon a potential for transcending technology that seems contrary to much of the novel’s conceptual and philosophical architecture. Indeed, while it is frequently (and rightfully) praised by scholars of postmodern literature and culture for its literary engagement with information technology, *Neuromancer* seems to want to have it both ways with regard to this engagement, critically imagining a technologized dystopia while romantically

¹ See McHale, *Constructing* 109-112 for a useful tracing of this critical gesture.

seeking escape from it. As Claire Sponsler notes of the novel, this reliance on “an epistemology that privileges cause-and-effect plot development and the unified humanist subject” (636) epitomizes cyberpunk’s general status as “doomed to play out old plots peopled by old characters within a scene that calls for a radically different formulation of human agency and action” (639). Media exists within the narrative worlds of these texts precisely as an entity to be pushed against in a return to and retrenchment of conventional values.

Taken as a collective whole, the mainstream canon of the media novel embodies a similar paradox: while these texts are *about* media in thematic and ideological terms, presenting a valuable critique and a necessary starting point for conceptualizing the status of print literature within the mediated environment of postwar culture, they are not structurally or formally *of* media, except in the most broadly generalized and theoretical moments and manners. Indeed, many of these texts largely sidestep the need Sponsler cites for “radically different formulation[s]” not only of agency and action, but also of authorship and of writing itself. (In this sense, much of the narrative and ontological experimentation of what is often considered high postmodern literature resembles in hindsight an attempt to work out questions of contemporary technoculture during its emergence and from an exterior location.) Approaching media from the outside, these texts offer responses that seek (even if futilely) to remain outside, thus cutting themselves off from the critical leverage that the novels I discuss gain through the mediations they imagine on the surface of the page.

Much of the critical writing on the media novel pursues an approach in the image of the texts it discusses. In turning now to a review of several crucial texts in this body of

work, I want to chart a trajectory between two strategies of reading the media novel (or perhaps more accurately, two varying levels of remove at which to approach the media novel). Craig Dworkin's discussion of the politics of poetry provides a useful analogy through which to parse these strategies. Following the work of Jed Rasula, Dworkin argues for a distinction between the "politics *in* the poem[, which] would indicate Pound's discussion of Mussolini, say, or Adrienne Rich's feminist thematics," and the "politics *of* the poem: what is signified by its form, enacted by its structures, implicit in its philosophy of language, how it positions its reader, and a range of questions relating to the poem as a material object" (*Reading* 4-5, *emphases original*). For Dworkin, critical analysis that operates solely within the domain of politics in the poem risks being politically inadequate, whereas analysis of the politics of the poem might more successfully and fully uncover its political operations through close attention to "the way in which the formal elements of a text signify in specific, politically and historically inflected ways" (*Reading* xix). While I am reluctant to disregard altogether the political adequacy of thematic analysis, I nonetheless argue that the distinction Dworkin draws becomes all the more apparent, and indeed all the more urgent, in the case of literary texts that address media technologies. Such texts certainly have the capability to offer useful interventions at the level of thematics, and indeed often do so. Yet at the level of form—in the ways in which they store, manipulate, and circulate information—these texts have the capacity to engage their subjects in a particularly charged and reflexive fashion that goes beyond a politics of reflection and critique to imagine a potential for dialogue and synthesis across forms and technologies.

Most critical analysis of the media novel, however, is concerned largely with the politics in the novel. These studies run chronologically parallel to an emergent cultural conversation regarding the implications of electronic technology for the high-cultural literate thinking associated with print textuality. This conversation constitutes an attempt to come to terms with what Jay David Bolter describes as “the late age of print,” in which “[w]ord processing, databases, e-mail, the World Wide Web, and computer graphics are displacing printed communication for various purposes” (2). Responding to this displacement from within the cultural domain of humanities academia, critical considerations of literature and media largely read the media novel as a force in resistance to media technology in order to engage in that resistance themselves. In doing so, they replicate both the antitechnological political horizon of much of the literature they discuss and that literature’s failure or refusal to engage media technology at a localized level as part of their critical approach. In keeping with the approach of the novels themselves, these studies address technology thematically, conceptually, and narratively, but rarely formally. For these critics, technology consequently becomes tantamount to a cultural and ideological backdrop to the novels they discuss, an abstract force that is often so generalized that it is virtually indistinguishable from the larger context of late capital culture, rather than remaining an irreducibly distinct, dynamic, and constitutive element of that culture.

Joseph Tabbi’s work in *Postmodern Sublime: Technology and American Writing from Mailer to Cyberpunk* (1995) exemplifies this generalization of media technology. Tabbi begins his study with a promise to champion novelists who “push beyond the limits of the literary [in order] to bring their writing into contact with a nonverbal technological

reality” (xi). Such a focus on the simultaneity of close contact and dissonance, with its ambitions of capturing a certain kind of operational specificity of technology, would seem to strike at precisely the theoretical approach I myself am advocating and pursuing in this project. Yet in the texts Tabbi discusses, and in the approach he takes to them, the contact between writing and technological reality still takes place well within the limits of the literary, under the sign of “a critical investigation of (and occasional polemic on behalf of) a contemporary literary *realism*, one whose psychology expresses itself in the material constructions of an emerging technological reality” (x, emphasis original), rather than a realism of intermedia negotiation between the novel and other technologies. Here the material conditions of technology serve as objective correlatives, subsumed to the psychic interiority and generic domains of literary production. As such, technology remains distinct in Tabbi’s approach only to the extent that—indeed, in order that—it can be colonized and incorporated as part of conventional novelistic textuality. This positioning of technology as nonliterary through literary realism is particularly paradoxical given Tabbi’s critique of the critical tradition that precedes his own work. He describes the work of Edward Mendelson and Tom LeClair as

instructive, informed as [it is] by many of the “nonliterary” discourses that sustain the technological culture in the first place. But the appearance that such discussions engage directly with the technological subject, that they and the novelists under discussion have somehow “mastered” the material of technological culture, is ultimately illusory. It is not enough to say, as LeClair does, that excess and complexity are necessitated by the complex world we inhabit[.] . . . The excess to be found in technological systems . . . is scarcely of a

type with literary excess; the individual writer, often a loner with pen and paper, could never compete with the high-budget productions of the various corporate media. Excess in this fiction is not simply *more* than but *other* than the technological mechanisms, media, and categories it deforms. . . . No discourse is autonomous, but when fiction can reach the sublime register only by borrowing symbolic capital, copyrighted effects, and communicative energies from other media, it is likely to be the losing partner in a corporate merger. (12-15, emphases original)

In spite of its own intrinsic value as a critique of the critical concept of excess, Tabbi's response retains the antagonistic, zero-sum quantitative framework of these earlier critical approaches, and in doing so oversimplifies the dynamics between literature and technology at several levels.

Firstly, in continuing to imagine these dynamics in terms of scalar quantity and difference—of whether or not literature can marshal enough complexity to master or deform technology—he limits the potential avenues of engagement to the already unsuccessful options of “more” and “other” excess. Yet perhaps the most striking form of literary and informational excess employed by the novelists I consider in this dissertation is the excess of the same, an uneasy formal approximation that comes into view in moments in which literary writing verges upon the operations of another media form qualitatively rather than quantitatively equaling, exceeding, or diverging from it. These moments pose an alternate trajectory for literary engagement with contemporary media technology, in which literary writing claims the potential to appropriate and imaginatively replicate the workings of that technology, not as a means of critiquing it or

keeping up with it, but rather as an index of investigation, using its own operating principles and those of the writing systems around it as testing grounds for one another. Tabbi clearly sees little potential for this approach, as visible in the decidedly negative prognosis of the last sentence of the passage above. This critical foreclosure partly stems from an ideological bias about literary production as altogether different and distinct from other modes of media production, as an enterprise in which the technologically and existentially outdated “loner with pen and paper” (as opposed to a computer or even a typewriter) must explicitly make an entry into technology’s operations from the outside in order to engage them. Yet Tabbi’s move is also partly the result of the tradition and canon of the media novel as well as of his relation to it, selecting and responding to texts that from the outset position themselves outside of technology so as to intervene within it in terms of quantitative excess, complexity, and mastery. In picking a different grouping of texts, a corpus whose individual authors seek to mobilize media technologies’ “communicative energies” from the outset rather than to reject this possibility as Tabbi’s cynicism would seem to recommend, I also propose a different critical terrain with admittedly different stakes. Rather than adjudicating between the “losing [or winning] partner[s]” of a *fait accompli* merger, the authors I discuss imagine a system of perpetual, incremental exchange, a more localized, microscopic working out of how to live and communicate from within technological saturation.

John Johnston’s work in *Information Multiplicity: American Fiction in the Age of Media Saturation* (1998) introduces a valuable element of flexibility in its conception of the contemporary novelistic response to media technology. Johnston charts a shift away from the conventional novel’s “nuanced and realistic representation[s] of human beings”

(6) and “dramas of a self-reflective consciousness . . . enacted and brought to fruition in language” (13) towards his theorization of a novelistic development that can be broken down into two historical moments within the post-World-War-II period:

“the novel of information multiplicity defines and even constitutes an always excessive and polysemic information field in which the uncertainty and ambiguity of information are both problem and solution, truth and method[. T]he novel of media assemblages evolves from the former when information becomes fully quantified and digitalized (or is assumed to be so)[.] . . . [T]he novel of media assemblages takes for granted a new level of information control, evident in the digitalization of media and the totalizing effects of electronic communications more generally.” (4-5)

In keeping with its media-historical underpinning, Johnston’s demarcation of these two forms falls along roughly chronological lines: *Gravity’s Rainbow*, McElroy’s *Lookout Cartridge*, and William Gaddis’ *JR* exemplify the novel of information multiplicity, while DeLillo’s work, Pynchon’s *Vineland*, and *Neuromancer* exemplify the novel of media assemblages. Following Friedrich Kittler, Johnston anchors this framework in a theorization of these texts as discourse networks, or, literally, as writing-down systems [*Aufschreibesystems*], a gesture through which he shifts focus from the traditional novelistic concerns noted above to a concern with media processes at the level of the novel’s thematics as well as of its structural operations. He suggests that in the context of postwar media saturation, novels have the potential to operate as “site[s] where the culture’s capabilities for inscribing, storing, retrieving, and transmitting information become a possible object of scrutiny. In these terms, the novel of information multiplicity

can be said to inquire into the nature and limits of the culture's instruments of data processing" (13).

In the dissertation that follows, I take Johnston's call for a shift from the novel's linguistic dramas of consciousness to an engagement with media information as a grounding premise. Indeed, the texts I discuss inquire into the data processing of contemporary culture by attempting to perform that very processing as closely, complexly, and rigorously as the surface of the printed page allows. Yet in following Johnston's shift, I also pursue several crucial modifications to it. The first and most localized of these is an objection to the media-historical assumptions of his periodizing distinction between novels of information multiplicity and novels of media assemblage, a division that, in terms of his situation of authors around it, seems to echo and reconstitute a standard critical consensus regarding high modernist and postmodernist novelistic strategies.² The critical conversation that has accumulated around these terms has been extremely valuable for literary and cultural studies of the post-World-War-II period,³ and with regard to the specific terms Johnston charts, I sympathize with the importance he and other critics of culture and technology attribute to the rise of the digital—indeed, I myself address both the realities and the mythologies culturally associated with digitization in the later chapters of this dissertation. However, to adhere so strictly to such a division is to suggest that certain structural fluidities were simply not present within either the novel or the media it engaged prior to the historical shift Johnston associates with the novel of media assemblages. My focus on the instabilities and interdependent

² See McHale's discussion of "the modernism of Pynchon's postmodernism in *Gravity's Rainbow*" (*Constructing* 62ff.) for one useful parsing of these lines.

³ See Marianne DeKoven's "Selected Annotated Bibliography" on the postmodern (323-334) in *Utopia Limited: The Sixties and the Emergence of the Postmodern* for a comprehensive collection of texts engaged with these issues.

incongruities in the ways in which the novel approaches media across the postwar period, from the office typewriter to the global network of the web, is an attempt to render that division more fluid, and in doing so to suggest that the tactics and intentions that Johnston associates with novels of media assemblage have been present (or at least possible) in various forms over a longer media-historical timespan.

In addition, in both the ways in which I read the novels explored in this dissertation and the media-theoretical context within which I situate them, I intend to pursue an application of Kittler's concept of the writing system that is at once both more closely rigorous and more flexible than Johnston's.⁴ In a manner that echoes the slip towards abstraction that Tabbi makes, Johnston seems to apply the concept of the writing system to talk about human subjectivity and culture in simplified terms, through the notion of the "generalized 'culture medium'" (5) that he borrows from DeLillo. Indeed, his assertion that the novelistic models he imagines "reflect new forms of postmodern subjectivity . . . most fully by serving as exemplary instantiations of a contemporary psychic apparatus" (8) seems to foreground the newness of the media novel precisely in order to dismantle it. Within such an end result, media technology shifts to serve as a means and a metaphor, a conduit towards a goal that is at best a sociohistorical transposition and updating of traditional novelistic interests rather than the structural renovation initially promised by Johnston and more fully imagined by the novelists I discuss.

Moreover, whereas the governing conceit of his application of Kittler's thinking—namely that the contemporary media novel is "best described as a fictional assemblage produced by a writing machine" (13)—remains predominantly metaphorical,

⁴ See the beginning of Chapter One for a fuller discussion of my engagement with Kittler.

an abstract concept for novelists, the novels I consider push this metaphor one step further towards the actual machines they address. Every novel is produced by a writing machine at some level (if not at multiple ones), but a novel about another kind of machine can never actually, literally be the product of that other machine. Yet the novels I discuss here pretend to do just that, imagining both the fluidities and the incompatibilities of their own intermedia production in ways that trace a complexly and closely integrated route through the postwar information system. Thus in what follows, I read the structural and formal systems of these novels as in direct dialogue with specific systems of technology rather than with the culture medium or postmodern subjectivity at large. In this sense, by applying Kittler's concept of the writing system more closely and literally, my project attempts to recalibrate the terms of his claim that "[m]edia determine our situation" (xxxix), a pronouncement that has come to function as shorthand for a particularly pure form of technodeterminist thinking in media studies. Kittler's totalizing claim suggests that technology structures all dimensions of human experience, to the point at which it ultimately overtakes and erases all remnants of humanity within that experience, "not only subvert[ing] writing, but engulf[ing] it and carry[ing] it off along with so-called Man," leaving only "[p]atterns and moirés of a situation that has forgotten us" (xxxix, xli). In the readings and arguments I stage below, I attempt to outline a body of creative work in which media provides the novel with various sets of determining terms, operations, and forms, without being strictly determinant within them; these novels in turn work within the parameters of those various media technologies towards ends that are explanatory and dialogic rather than resistant or strictly, narrowly critical.

N. Katherine Hayles' notion of media-specific analysis provides one useful employment of this qualification of Kittler's critique of writing. Hayles' recent work has provided a crucial avenue for the study of literature and technology in her consistent advocacy of critical attention to the interdependent material and semantic relations between aesthetic objects and the information technologies that produce them. She calls for an approach to texts, broadly defined, as "artifacts whose materialities emerge from negotiations between their signifying structures and the technologies that produce them" (*Mother* 142), and says of literature in particular that "[w]hen a literary work interrogates the inscription technology that produces it, it mobilizes reflexive loops between its imaginative world and the material apparatus embodying that creation as a physical presence" (*Machines* 25). In insisting on the importance of understanding media objects in the context of their own particular modes of production, Hayles provides an indispensable localization and specificity to the overall enterprise of media studies. Moreover, in imagining literary production and criticism as vital elements within this enterprise, she offers a valuable integration of methodologies from the field of book history with media studies in a manner that invites critical consideration of the materiality of print literature in a newly and indeed more fully contextualized fashion amidst the media ecology of the late twentieth and twenty-first centuries.

In this dissertation I employ both sides of the model she poses, thinking about the meaning production behind the operations of various nonliterary information technologies as well as the ways in which print books manifest their own meanings in material dimensions, "strengthen[ing], foreground[ing], and thematiz[ing] the connections between themselves as material artifacts and the imaginative realm of

verbal/semiotic signifiers they instantiate” (*Machines* 25). However, Hayles’ theorization of the interdependence between texts and technologies emerges largely from the study of the relations between print literature and electronic literature, rather than from the consideration of any broader media ecology. Thus while her work effectively traces the relations between the print and electronic domains as well as the autonomy of each one as a media form, precisely in parsing out these two domains, each with its own unique internal modes of material signification, she leaves the possibility of convergence and overlap unaddressed. Indeed, her model of medium specificity can be productively employed in an inverted form as well: what insights emerge from print texts whose forms “strengthen, foreground, and thematize” not their own status as material artifacts but rather the materiality of other technologies? If, as she claims, “the narrative conventions of the novel, rooted in the seventeenth century, are inscribed with writing technologies profoundly different from the mechanical printing presses with which the history of the novel is deeply entwined” (*Mother* 117-118), this “profoundly different” domain includes not only the digital media of the present moment that she focuses on, but also a wider and more eclectic terrain of information technologies in the postwar period. The critical stakes of turning to this area left open by Hayles’ schema amount to more than a simple completism or an expansion to more technologies or other technologies for their own sake. On the contrary, engaging in media-specific literary criticism of texts that work imaginatively across media rather than within their “native” medium opens the space for a dynamism that emerges from the staging of a self-conscious interchange between two technologies at a localized material level. The critical purchase that this area of inquiry offers cuts in two directions: the opportunity to develop a complex theory of how the

medium specificity of the novel's pages provides a "material metaphor" (*Machines* 22) for the medium specificity of another information technology—or, to put it more simply, how the form of the novel mediates another technological form—in turn brings to light the ways in which those two technologies might interact and intervene more productively within the aesthetics and politics of lived technological experience.

Appropriate Form: Speculation and Politics at the Threshold of Media

The strategies of formal novelistic experimentation I focus on in this dissertation function as a means of shifting away from the generalized narrative and thematic approaches of much of the literary and critical work on media technology to date towards the possibility of imagining a more dynamically engaged relationship between literature and technology. Through these strategies, the writers I discuss manipulate novelistic text in ways that directly represent and appropriate the operating procedures of a particular information technology; they go beyond simply borrowing the communicative energies of that technology (to return to Tabbi's term) to claim them as their own, as the driving, constitutive forces in a complex negotiation of structural, authorial, informational, and ideological resonance and dissonance. In different novels, this negotiation takes place at different levels of the text: in *Running Dog* and *Transmission*, for example, the authors' appropriations of technological form take shape as breaks in otherwise relatively conventional narratives, subverting and at times rewriting the underlying assumptions, preoccupations, and discursive processes of those narratives. In *To Repel Ghosts*, Young's appropriation of the LP record form is a structural and conceptual conceit, a reimagining of a print text as a collection of records in order to dissect and reconfigure

how each form organizes and stores different units of information. In *a*, appropriated processes constitute the entirety of the novel's mode of production: by using a network of tape recorders and typewriters to produce the very text of his novel, Warhol asks deep-reaching questions about the embodied practice of mechanical writing. As a group, these strategies exemplify what Dworkin describes as a radical formalism that deploys "textual details not merely as points of description but rather as inherently significant (that is, both important and signifying)" (*Reading* xvii).

My attention to these strategies is central to understanding the ways in which these novelists position their texts as preexisting apparatuses within the technological landscape rather than from outside it. As Dworkin says of experimental poetry, these novels demonstrate, explore, and expand "the way in which the formal elements of a text signify in specific, politically and historically inflected ways. . . . [F]orm must always necessarily signify but any particular signification is historically contingent and never inherently meaningful or a priori" (*Reading* xix-xx). Thus formal appropriation serves two related ends in these novels: firstly and most broadly, it is a way of engaging the historical conditions of various media technologies rather than of divorcing, detaching, or receding from them. Moreover, in employing formal signification as "historically contingent," these novels in turn represent media technologies themselves as similarly and equally historically contingent. This contingency is at the crux of their use of appropriation as a technique. Rather than engaging technology as an a priori abstraction itself, they engage the profoundly idiosyncratic manifestations and traces of particular technologies: these novels explore the discursive, aesthetic, and political implications of writing on an office typewriter, tracing a lost film, holding and playing an LP record, and

falling victim to a computer virus. These instances can never stand in for technology in its entirety as a social or political force (indeed, no instance or group of instances can), and indeed their purpose within these novels is precisely the opposite of that totalizing intent. Rather than seeing technology as such a transhistorical, universalized force, these novelists use form to isolate various historically and materially specific ways in which technology structures information.

In the works I discuss in this project, radical formalism takes shape not only in particular moments of appropriation but also, more specifically, in moments where that appropriation triggers a form of limit-textuality in relation to media technology. Warhol's *a*, for example, uses the constraints of the typewriter system to produce a text that verges on encyclopedism in its attempt to document multiple channels of media information, but also challenges its own readability through the abundance of error that emerges from the technological apparatus necessary to perform that documentation. DeLillo centers the narrative of *Running Dog* around the lone existing print of an apocalyptic film as a way of opening a speculative space for imagining the end horizon of celluloid film in the face of electronic video, while Kunzru's *Transmission* centers around a similar limit figure in the form of a computer virus, a communication whose sole purpose is to saturate the internet with itself so as to occlude any and all other communications. The "five sides" that comprise Young's *To Repel Ghosts* cohere in a manner that is at once both colloquially and culturally rational and physically impossible, troubling the interdependent domains that constitute the record as a physical object. Performing and representing encyclopedism, error, proliferation, singularity, and impossibility, these gestures privilege radical form over narrativity in ways that exemplify media processes at

the extremes, tracing an excess of information that is as localized as it is all-encompassing. In keeping with their insistence on the materiality of technological media, these novels' turns to limit cases of technology also frequently place limit objects at the center of their concerns: the omnibus transcript, the one-of-a-kind film, the impossible record, the ubiquitous virus. Although (as I have noted above) these objects are each staged at different levels within their respective texts, they all dominate the worlds of those texts, overwhelming and often overshadowing their characters and narratives. In this sense, they exemplify the radically reconstructive social effect that Bruno Latour attributes to inanimate objects as a function of their incommensurability with traditional social ties. Latour argues that foregrounding the agency of objects as capable of "redistribut[ing] the whole [social] assemblage from top to bottom and beginning to end" (76) provides an alternative to the "shrinking plot" of social relations constituted by "'meaning,' 'symbol,' 'intention,' 'language.'" (83). Although Latour uses "plot" here in its spatial sense, as a metaphor for a social space, applying his thinking to the media objects in these novels resonates with the narrative sense of the term as well: in reconfiguring their respective texts in their own images, these media objects provide alternatives to and expansions of both the traditional categories of meaning production contained by the shrinking plot of the conventional social novel and the shrinking plot of plot itself. Indeed, the monumentality of these media objects serves as both a circumstance to which these novelists respond—through a registration of and commentary upon the pervasiveness of contemporary media technologies—and a means of leverage through which they create their own points of departure for speculative and

creative reimaginings of the parameters of the contemporary media landscape and of the novel within it.

By using form to imagine the limits of how different media technologies record, store, play back, circulate, and erase information, these novelists engage the material limits of novelistic consumption as well as of novelistic production, asking us to read in new ways in order to come to terms with texts that have been written in new contexts, through new capabilities, and under new constraints. In this sense, these authors invite a set of reading practices for the print novel as nothing less and nothing more than a contemporary object of media technology, a repository of information whose forms and structures invoke its own mode of production as well as the other modes that surround and inform it in every sense of the word. Dworkin's juxtaposition of radical poetic experimentation against conventional literary production imagines a similar role for the limit text in relation to language:

[b]ecause many of [these works] stand on the threshold of legibility, they serve as limit cases that define the field of everything that is readable, and the exceptional extremity of their means, in fact, allows us to better test the claims we would make about all literature. Such works . . . further our understanding of the constraints and possibilities inherent in the act of reading, the construction of linguistic meaning, and the very nature of language itself." (*Reading* xxii)

In the case of the media novels I discuss below, the extremity of means points towards other means, opening the way for a rethinking of the technological process of meaning production. By imagining literary production at the threshold of another media form, these texts simultaneously mark off and transgress the boundaries of a complex

multitechnological landscape through literary language. They trace the material and discursive nature of technological information and offer themselves as multidimensional testing grounds for the relations between print literature and other forms. They ask not to be read in the conventional sense of the term, but rather to be traced, channeled, catalogued, decoded, and recoded as information amidst other information. In order to stage such interpretive operations, the analysis I offer throughout much of this project relies upon media theory and media history as much as it does upon literary or cultural theory, if not more so. Thus rather than reading *Running Dog* as an exemplar of postmodern simulation, for example, I use Gilles Deleuze's writings on the politics of the cinematic image to situate DeLillo's novel as an intervention within a historically and materially specific nexus of questions regarding media-technological change in the late 1970s. As an endeavor to trace these novels as media technologies at the same time that I read them as literary works, this approach is itself part of my argument.

I focus on these novelists' turn to form and technique in order to trace a specific approach to the politics of media technology and the politics of the novel in response to that technology. In using the tools of form to appropriate and interrogate media technology at a localized level, these novelists turn the political and ethical disengagement traditionally attributed to form on its head, intervening within the domains of other media at their most elemental and constitutive level. Thus in tracing these interventions, my project uses form in the sense articulated by W. J. T. Mitchell in his recent essay "The Commitment to Form; or, Still Crazy after All These Years." Mitchell's re-reading of form responds to a literary-critical consensus that "[i]f form has any afterlife in the study of literature, its role has been completely overtaken by the

concept of structure, which rightly emphasizes the artificial, constructed character of cultural forms and defuses the idealist and organicist overtones that surround the concept of form” (321). While this consensus understands form as “idealist and organicist,” disengaged from material reality by way of a kind of diaphanous aestheticism, it at the same time sees it as limited in its horizon of possibility by an inverse problem as well, amounting “at best to belong[ing] to the merely instrumental sphere of means . . . the *manner* in which something is done, a way of getting from here to there, a spatial or temporal pattern that has value only in relation to the end it serves” (322, emphasis original). Mitchell, however, sees this status of form as “means” as being precisely the source of its political and ethical efficacy, rather than as a condition that negates or occludes that efficacy: “[i]nsofar as formalism insists on paying attention to a way of being in the path rather than to where the path leads, it seems to me central to any notion of right action” (322). Dworkin sees a similar possibility in his call for a “radical formalism [that] pursues the closest of close readings *in the service of* political questions, rather than to their exclusion” (*Reading 5*, emphasis original). This reclamation of the “emancipatory, progressive political practices” (Mitchell 322) that formalism makes possible opens the space for a particularly strong dynamism when applied to media technology.

Indeed, as the very meaning of the term media (as well as its cognates medium and mediation) suggests, these technologies are themselves means, ways of moving information “from here to there” across various sites and contexts of storage. This status, of course, can never be divorced from any of the more macroscopic political domains that surround it—in this sense, media form epitomizes the “artificial, constructed character”

of cultural production rather than purporting to exist outside of it. Yet the inverse relationship also holds true: just as the workings of media technology cannot be divorced from politics, they (and the artistic works that engage them) cannot be reduced to politics either, as if particular technologies existed only as abstract, epiphenomenal signposts for various vectors of power. Looking at the appropriation of media technology through literary form, then, provides a way of mediating between these two extreme views, tracing the complex, overlapping circuits among technological materiality, aesthetic production, and political possibility, as well as a way of seeing how literary production in particular might intervene within these circuits in a manner that imagines new orientations both for its own media-historical trajectory and for the media landscape more generally.

As potentially productive and progressive as these new orientations are, they nonetheless take shape within a political landscape whose horizon of possibility is inevitably already curtailed by systems of power that are often aligned and intertwined with various media technologies, if not necessarily synonymous with or identical to those technologies. Indeed, to claim, as these novelists do and as I do along with them, that the novel (re)gains political mobility through a turn to radical form—to claim, in the terms Tabbi uses, that it is no longer categorically the loser in a corporate merger in this situation—is not necessarily to claim that it instead becomes the winner, nor that the technologies in question themselves become visible as wholly or even predominantly emancipatory in being reimagined through the novel. On the contrary, it is the exchange itself between these domains that becomes the potential source of political possibility, not any particular outcome per se. While this exchange is not a zero-sum one, its stakes are

nonetheless inherently partial, and the constraints of the political landscape in which it takes place are inescapable.

The appropriative, synthetic approach these authors employ claims for the novelist the political location that Hans Magnus Enzensberger attributes to the producer of electronic media information—in contrast to the novelist—in his essay “Constituents of a Theory of the Media:”

[t]he producer can never pretend, like the traditional novelist, “to stand above things.” He is therefore partisan from the start. This fact finds formal expression in his techniques. Cutting, editing, dubbing—these are techniques for conscious manipulation without which the use of the new media is inconceivable. It is precisely in these work processes that their productive power reveals itself. (274)

These novelists collapse the dichotomy Enzensberger constructs between the producer and the novelist. By making a wide array of media techniques—cutting, editing, and dubbing as well as transcription, mixing, playback, distribution, and erasure—central not only to the “productive power” of their writing but ultimately also to very construction of their texts themselves, they reimagine the mechanics of the novel as part of the mechanics of media technology, and in doing so they leave behind the detached location of the “traditional novelist” to open a partisan space for writing within the media landscape. The history of media theory has traditionally read Enzensberger’s essay as a dead end, as an argument that places a naïve faith in the potential for turning the powers of media technology against the powers of authority. In “Requiem for the Media,” a direct and acerbically critical response to Enzensberger’s essay, Jean Baudrillard dismantles what he sees as Enzensberger’s central assumption, namely that “productive

forces and technology” “are the promise of human fulfillment, but capitalism freezes or confiscates them. They are liberatory, but it is necessary to liberate them” (Baudrillard 280). For Baudrillard, such an approach to media technology ultimately only perpetuates acquiescence to the hegemony of dominant power through that technology. He argues instead that a successful critical approach to media technology “responds, there, on the spot, and breaches the fundamental role of non-response enunciated by all the media. . . . It volatilizes the category of the code, and that of the message” (287).

Viewed through nearly forty years of hindsight and capitalist technological expansion, a great deal of the criticism that Baudrillard levies upon Enzensberger is valid. Indeed, to argue, as Enzensberger does, that “[t]he new media are egalitarian in structure” (265), would at this historical juncture be to oversimplify the situation, to say the least. Yet while these novelists follow Baudrillard’s cue in being decidedly, emphatically responsive, their responses work at a political angle different from the volatilization of the code that he sees as necessary. Operating from a cultural and artistic location within the media apparatus of contemporary culture rather than outside of or against it, they work instead from the starting proposition that such a categorical “checkmat[ing] of the dominant form” (Baudrillard 287) is not possible in response to media—nor, for that matter, is it possible through media as a means (if indeed it ever were possible from either position). Their writing responds to media technologies “not [as] *co-efficients* [a perspective that characterizes much of the critical and creative writing I have outlined above], but *effectors* of ideology. Not only is [media’s] destiny far from revolutionary; the media are not even, somewhere else or potentially, neutral or non-ideological” (280, emphasizes original). In attending to localized, idiosyncratic literary representations and

appropriations of media technology in this project, I have paid close attention to the particularities by which each individual technology functions as an effector of ideology: the way in which the typewriter configures humans and machines, for example, or the way the LP record allows for the inscription and distortion of cultural identity, or the way the global network of the web circulates bodies, information, and capital. Yet this non-neutrality is not necessarily one-directional: while these technologies themselves produce power and set it in motion, they rarely if ever do so in a closed, fixed manner. On the contrary, their mechanics lend themselves to unevenness and instability, and the novelists I discuss offer their strongest interventions in claiming this instability as a point of entry (dialogically rather than critically). In turning to media as a form—as the language in which they communicate and as the currency in which they conduct aesthetic and political business—they seek not to “smash[] the code” (Baudrillard 287) but rather to speak in it, in search of new modes of dialogue, new planes of relation, and new lines of aesthetic and political possibility.

The novel has been a form in dialogue with (other) technology at least since its rise within western culture in the eighteenth century as a narrative object under the authorizing effects of the “epistemological powers of print” (McKeon 386). Indeed, from crucial early instances of the form such as Miguel Cervantes’ outsourced translation of a lost Arabic manuscript to produce *Don Quixote* and Samuel Richardson’s mock-editorship of the letters that comprise *Pamela* to the works I consider in this dissertation, key figures in the production of the novel have used it as a testing ground for speculative, imaginary connections with other forms of information technology, as a space within which the bound print text masquerades as something else, simultaneously demarcating

and transgressing the thematic, aesthetic, material, and political boundaries that separate and define these forms. By foregrounding that project within their writing, the contemporary authors I discuss in the essays that follow stake their own positions within the overlapping histories of novelistic innovation and technological change, and in doing so they attach new currency and urgency to the stakes of those histories. Yet in the ways that they stage these engagements, they also attach new possibility to these histories, using novelistic form to respond to the constantly changing paradigms of media technology in a manner that is both closely engaged and dynamically open.

**Lost in Transcription:
Postwar Typewriting Culture, Andy Warhol's Bad Book, and the Standardization
of Error**

To understand the typewriter as a freestanding, independent technology of textual production, as the alpha and the omega of a certain kind of quintessentially modern writing, is at the same time to reconceptualize the material, technological, and textual dimensions of that writing. As the first technology designed for individual engagement in what contemporary culture commonly understands as word processing, the typewriter placed the writing body into immediate contact with the means of producing a standardized, seemingly “completed,” type-based text. In doing so, it radically compressed the process of textual production from its previous protracted form under the technological regime of the printing press, and in turn rendered that process subject to the possibility of error in a newly redundant fashion. Equally importantly, in the corporate and clerical environments in which it would eventually take hold in greater numbers than in any other context, the typewriter brought the writing body into contact with other bodies and other machines that variously served to dictate, record, replay, and transcribe information, thus constellating around itself a distributed network of textual production in which bureaucratic, technological efficiency and dispersive textual uncertainty became visible as two intertwined, co-constitutive forces. In the chapter that follows, I map the aesthetic domain produced by the presence of error and semantic undecidability in typewriting across several technological, literary, and performative moments.

But first, why the typewriter, given its almost categorical obsolescence? While the typewriter has been the focus of a number of critical considerations in recent years, these studies have often positioned it, whether explicitly or implicitly, as an artifact cordoned

off by history.⁵ After all, given the computer's dominance of contemporary technology, it might seem strange to focus on the typewriter as anything other than a discretely, strictly historical object. It might likewise seem that the typewriter's specific mobilization of textual characters and physical bodies is historically contingent and temporary, and thus now irretrievably in the past. In this sense, it is a virtually lost technology, occupying a strange, interstitial space within the broader field of media history, a fulcrum point between the moveable type of modern print culture and the malleable digital information of postmodern electronic culture. However, I argue that consideration of the typewriter as a writing system provides critical purchase on this field precisely to the extent that the typewriter itself is profoundly anachronistic, ephemeral, and ultimately obsolete. In this sense, then, my tracing of the tension between the standardization and destabilization of writing that the typewriter sponsored at the microscopic textual level is also an attempt to engage the more macroscopic cultural tensions that the typewriter reveals within the history of print textual production. Because of its transitory, interstitial position within the history of writing machines in both literary and institutional contexts, the typewriter provides a unique test case for considering the ways in which emergent information technology reconfigures the process of writing. It exemplifies the residual nature of media technology, what Charles R. Acland describes as "the way the dynamics of culture bump along unevenly" (xix) in his recent critique of new media's rhetoric of perpetual newness. Indeed, in its rapid, massive popularity and its subsequent, equally rapid and massive loss of any currency within the cultural and technological landscape, the typewriter provides a detour from two dominant and counterposed lines of thinking about the history of media technology. On one hand, Walter Benjamin argues that each new

⁵ See Gitelman and Kittler for examples of this approach.

media technology represents “a tremendous shattering of tradition” (“Work of Art” 221), recalibrating aesthetic production, perception, and social organization. On the other hand, the recent thesis of remediation, advanced most notably by Jay David Bolter and Richard Grusin, holds that “[w]hat is new about new media comes from the particular ways in which they refashion older media and the ways in which older media refashion themselves to answer the challenges of new media” (15). These theories can certainly be synthesized, and the typewriter is certainly not wholly outside of the domain of either of them. However, through my focus on the typewriter I wish to underscore a more microscopic, incremental, and irregular conceptualization of media change, namely that on the ground, transitions between different media systems take place neither wholly through epistemic breaks nor wholly through gradually negotiated continuities, but rather through a densely overlapping system of fits and starts, dead ends, and remainders that haunt the margins of current information production through both their presence and their absence.

Two dominant narratives of the typewriter as a writing machine persist within the contemporary cultural imaginary. The first of these is the popular fantasy of the machine as an ornament and tool of authorial subjectivity. This narrative is visible in literary urban legends such as the claim often attributed to Ernest Hemingway that “there is nothing to writing. All you do is sit down at a typewriter and bleed;” the free-flowing improvisation mythologically associated with Jack Kerouac’s infamous typescript for *On the Road*; or the aura collected around William Gibson’s use of a manual typewriter to write the science fiction novel *Neuromancer* and, allegedly, all of his subsequent novels. Each of these stories is only partly true at best: the aphorism attributed to Hemingway is actually

a corruption of a line by sportswriter Walter Wellesley “Red” Smith; Kerouac’s unbroken, spontaneous 120-foot scroll of type was actually the product of seven years of planning and organization; and while Gibson did indeed write *Neuromancer* on a manual typewriter, he has not used such a machine in over twenty years.⁶ Yet the veracity of these legends matters far less than the way in which they function to instantiate a popular narrative of the Great Man wedded to his Great Machine as a means of self-expression within—and distinction against—the dominant technoculture of his moment: the tortured avatar of the Lost Generation cryptically plumbing the depths of mankind’s self-destruction, the King of the Beats tapping rhythmically in search of freedom in the shadow of the Bomb, the father of cyberpunk prefiguring the future of digital technology from an emphatically exterior position.

The work of the German media theorist Friedrich Kittler poses the strongest and most critically prominent counterthrust to the Romantic nostalgia for the author present in this popular narrative of the typewriter. For Kittler, who opens *Gramophone, Film, Typewriter* with the totalizing announcement that “media determine our situation” (xxxix), information technologies shape not only the parameters of aesthetic representation but also the very conditions of human subjectivity, ultimately profoundly distorting and evacuating both dimensions: “[o]nce the technological differentiation of optics, acoustics, and writing exploded Gutenberg’s writing monopoly around 1880, the fabrication of so-called Man became possible. His essence escapes into apparatuses” (16). Writing via the typewriter similarly constitutes the end of writing as such. In moving writing out of the (allegedly) organic individual literary space of the study and

⁶ For the original version of Smith’s aphorism, see Orr 7. For a discussion of Kerouac’s revisions to *On the Road*, see Chapter Eight of Nicosia. Gibson himself refutes the mythos around his creative practice; see “Since 1948.” For a more extensive discussion of the Gibson typewriter mythology, see Bukatman.

into the mechanized public multiplicity of the modern office, typewriting precipitated what Kittler views as the inexorable rise of the computer and the subsequent digitization of all meaning:

[f]or mechanized writing to be optimized, one can no longer dream of writing as the expression of individuals or the trace of bodies. The very forms, differences, and frequencies of its letters have to be reduced to formulas. So-called Man is split up into physiology and information technology. . . . World history comes to a close as a global typewriters' association. Digital signal processing (DSP) can set in. (16, 243)

Kittler sees handwritten text as a sensuous trace produced by the body's close contact with paper, a tissue woven by the hand and the stylus. By removing the hand from paper and replacing this bodily trace with discrete, standardized characters, typewriting effectively eliminates the writing subject in Kittler's mind: once writing is merely "a new and elegant tautology of technicians" (14), those technicians in turn become inseparable from the machines they use to produce text.

Numerous critics have addressed the stakes of Kittler's argument regarding the changing status of the human subject in the age of digital mediation, drawing widely varying conclusions about the impact of the transition to a digital media ecology.⁷ In spite of certain differences, these responses to the implications of Kittler's work share a common ground in their duplication of his emphasis upon the historical break imposed by the computer and his subsequent consideration of the computer as the central and controlling technology of the postwar period. In that the computer brings about the digitization of information and the convergence of media technologies, it is certainly

⁷ See, for example, Hayles, *Posthuman* and *My Mother*; and Hansen.

tempting to see it as effectively the only technology of the postwar period. This approach provides a number of useful openings for critical considerations of technology: a direct avenue of critique against the institutions of command and control that developed the computer, for example, or a foundation for the study of digital convergence, or a clear pathway to the study of information as a semantic and ideological form. However, in that it serves so often as an unquestioned *a priori* foundation for critical readings of postwar technology, this consideration of the computer as central is itself a presumption that produces as many blind spots as it uncovers. Indeed, the history of postwar technology is considerably more complex and diffuse than the Kittlerian line of thought would suggest. While the role of the computer is crucial, it is hardly monolithic. On the contrary, the computer is only one of many technologies that influenced writing and subjectivity in the second half of the twentieth century. Each of these technologies introduces its own modes of information production, storage, and retrieval; its own relations to the body; and its own social and subjective dynamics.

While a Kittlerian analysis of the typewriter sees its standardization as pointing towards either an epistemic foreclosure upon the thinking and writing human subject, an inevitable shift to the liquidity of information seemingly available within digital technology, or both, my discussion imagines the mechanization and standardization of writing as forces that are as internally disruptive and recombinant as they are reductive, if not perhaps more so. I will suggest that the potential for error that the standardizing dimensions of the typewriter introduced into writing opened the way for both a radically different textual aesthetic and a complexly networked mode of subjective self-fashioning. Reconsidering the typewriter as a technology of bodily error means imagining not only a

different approach to media history as I have suggested above, but also a different horizon of possibility for the aesthetics of modern and contemporary writing. Writing on the typewriter in the postwar period was undoubtedly marked by some of the standardization noted by Kittler. Yet this seeming predictability of the act of writing, visible in both the predetermined flatness of the typewriter's textual landscape and the highly structured institutional systems of mediation that surround it, produces undecidability and aesthetic tension rather than negating it. Unlike the writing systems that preceded it—stone tablets, manuscript writing, moveable type—typewriting is a system of spaces rather than of characters, in which letters relate materially, not linguistically. Error becomes discretely present in a new way through the human-machine negotiation of these spaces. Understanding this error as a central characteristic of the technologically structured writing of the late twentieth century—a characteristic, moreover, that is almost always erased, overwritten, or otherwise suppressed from the published version of a text—reveals the opaquely material secret history of that writing as a record of irretrievable and indeterminate relations between multiple bodies and machines.

In order to theorize this contingency, I consider three instances of human-machine relations within the context of the postwar typewriter. I begin by outlining the specific spatial and textual problems introduced by typewriter technology; my discussion traces these problems from the machines of the early twentieth century through the innovations of the phenomenally popular 1961 IBM Selectric. I show how the rise of the typewriter within office space over the course of the twentieth century is bound up with a complex routing of information within which bodies and machines were both regimented and

destabilized, connected with one another in a flexible network of textual production. My second site of inquiry is Andy Warhol's 1968 novel *a*, an avant-garde text that relies on typewritten transcription to rehearse and explode the circumstances of the modern office. By placing a radical pressure on readability through the novel's constant stream of unedited, unproofread, spatially irregular transcription, Warhol interrogates the position of the typewriter in order to raise questions about the role of physical presence, contact, and accident within the multiply mediated writing of the postwar period. I conclude with a discussion of the contemporary performance group the Typing Explosion. The Typing Explosion consists of three women who work in silence as an assembly line using vintage typewriters to produce what they describe as "poetry on demand" (*Explosion*). I argue that the work of the Typing Explosion presents not only an explicit claiming of women's creative and economic ownership over writing at the level of the text, but also a performative reexamination of the relations between gender, technology, and poetic expression within late capital culture in ways that establish a critical dialogue between the computer and the typewriter. In each of these three situations of typewriting, humans and machines engage in a manner that is neither wholly collaborative nor wholly dictatorial on the part of either entity, but is instead marked by the irreducible possibility of error.

Deformations of the Page, Assemblages of the Office: Typewriter Mechanics and the Poetics of Error

Kittler sets the typewriter apart from the gramophone and film in its status as a technology that radically limits the scope of the information it stores rather than

expanding it: “[t]he symbolic now encompasses linguistic signs in their materiality and technicity. That is to say, letters and ciphers form a finite set without taking into account philosophical dreams of infinity. What counts are differences, or, in the language of the typewriter, the spaces between the elements of a system” (15). Kittler sees typewritten text as nothing but technologically produced material, solely symbolic, incapable of providing any access to dreams or infinity for either writer or reader. Yet the typewriter charges the spatial dimension of writing through the same material qualities with which it restricts linguistic meaning, thus ultimately achieving its most important impact outside of language altogether, in the visual effects produced by typewritten text on the page. Given the importance of these spatial relations, Kittler’s attention to the “elements of a system” and the spaces between them as the important aspects of typewritten text suggests a number of technological meanings that problematize the solely “finite set” of signs he insists upon as a means of resolution or foreclosure.

In one sense, the elements in question are the characters of a given typeface, the smallest indivisible units of text. When made by a typewriter, these elements produce visual difference through the white space they mark; the typewritten page subsequently becomes a repository for the spatial rhythm between the presence and the absence of imprinted ink. Lisa Gitelman suggests that the initial novelty of typewritten text derived from “the sound of blank space, as the spaces between words and lines of type had to be created, rather than simply ‘left’ blank as they were in the production of handwritten pages. In typewriting, space on the page was *made* as well as *used*: writing newly involved ‘writing space’” (218, emphasis original). I would extend Gitelman’s argument to suggest that the production of space introduced by typewriting occurs not only

between words and between lines but also ultimately at a more microscopic level, between—or, perhaps more accurately, around—single characters themselves. Every keystroke on a typewriter produces both a black character and the white space surrounding that character.

This newly microscopic production of written space constitutes a radical shift from the spacing methodologies of the printing press. The single character has long been the operative textual unit for the reproductive processes of the printing press. In the proportional typefaces commonly used in most material produced on a printing press, each character in a given string of text is allocated a different amount of linear space relative to its intrinsic width. This allocation correspondingly distributes the white space around those characters in a way such that the text—because of its proportionality—is more easily and naturally readable by the human eye. Yet in the case of the typewriter, the single character is not merely a unit in the case of textual reproduction, but instead serves as the operative unit of writing itself, and thus of spatial difference as well. The white space around the characters of a given typewritten word is neither “left” nor “created” as blank in the same authorially conscious way as the space between handwritten or typeset words and lines; it is instead an inextricable product of the typewriter’s built-in characters. Moreover, whereas the printing press produces a block of text through a single impression of preset type onto paper, the typewriter employs a carriage that moves the paper back and forth under bars of type in order to allow for the production of text one character at a time. Because the typewriter uses this method of single discrete imprinting bars in contrast to the unified, set type of the printing press, its carriage must move the same distance along the page for every character typed. In order

to accommodate this standardized motion, it uses non-proportional monospace typefaces, in which an equal amount of linear space is allocated to each character.⁸

Thus the motion of the carriage, the same innovation that makes the typewriter a technology of individualized and instantaneous desktop publishing, also both standardizes the typewriter's textual production and introduces a disruptive trace of blankness around that production. Because the characters of a monospace typeface take up different amounts of space—an i or an l, for example, occupies much less space than an m or an n—they consequently leave different amounts of white space open between them. As an example, consider the different spatial contours of the quotation from Kittler printed below in two different typefaces. The first iteration of this sentence is in Times New Roman, a proportional typeface, and the second is in Courier, a monospace typeface:

Voice remains the other of typescripts. (228)

Voice remains the other of typescripts. (228)

The monospace version of this sentence not only extends longer due to the greater average width of characters in monospace type, but also cuts a much less regular spatial outline. The disruptively standardized spaces between words are echoed in the spaces between characters within words: a disproportionately large amount of white space gathers around narrower characters such as the “i” of “voice” and “remains,” whereas the first letters of “typescripts” appear cramped, almost pressing against one another. The admittedly self-reflexive sentence that I have used as an example here might seem to suggest a sort of modernist symbolic poetics of visual type, in which it

⁸ The two notable exceptions to monospace typewriting are the IBM Executive and the IBM Selectric Composer. For the history of the invention of the Executive and the introduction of the machine to the market, see Beeching. On the introduction of the Composer, see Chapter Nine of DeLoca and Kalow.

could be possible to assign thematic meaning to visual characteristics such as the isolated nature of the *i* or the crowded nature of “*type*” itself. However, it is crucial to acknowledge that the effects of monospace type stem arbitrarily from the shape and dimensions of the letters in use, rather than in relation to any linguistic meaning those letters might convey.⁹

Thus in contrast to the rational readability of proportional text, the monospace text of the typewriter produces a purely visual poetics of irregularity through its shifting sequence of textual presence and absence. The most fundamental change that comes with the advent of the typewriter manifests itself at the level of image before it does so in thought, memory, or any other such “interior” dimension that might be considered part of literary or poetic language. Precisely because of the monospace standardization of text made necessary by the mechanical constraints of the typewriter, the constantly shifting quantities of white space on the page become a source of alternate meaning present among the characters that the typewriter produces. This whiteness produces a visual and spatial effect rather than a linguistic one, the textual equivalent of an afterimage. Thus more so in the case of the typewriter than with any other form of writing, the space around the linguistic sign acquires a “materiality and technicity” of its own in close relation to the text it surrounds. Like phantom marks, these absences represent a form of

⁹ Indeed, the microscopic level at which this arbitrariness appears underscores the integral nature of these visual effects in relation to typewriting. Whether the author of a handwritten text makes choices regarding that text consciously or unconsciously, he or she has effectively total control over the spaces between words, lines, paragraphs, and so on, as well as between characters themselves. While this control is available to the author of a typewritten text at more macroscopic levels, the production of any concatenated string of two or more characters on the typewriter entails an engagement with the mechanically predetermined and thus uncontrollable spatial contours that produce this differential, disruptive effect.

signification that is outside of both language and text, all the more unstable for its being attached to such a stable, standard textual form.¹⁰

In addition to this spatialization of writing at the level of the letter on the page, the typewriter also introduced a number of other new theoretical-spatial problems, situations that presented themselves as part of the typewriter's new writing process. Within this process, the writing body became recontextualized—indeed, even reconfigured—in several ways and on several levels. Perhaps the most fundamental of these alterations is the extension of the body's components as necessitated by the interface of the typewriter. For Kittler, the sanctity of the body in the era before typewriting is paramount and ideal: “handwriting alone could guarantee the perfect securing of traces. It wrote and wrote, in an energetic and ideally uninterrupted flow” that was made possible by the uninterrupted contact of body, stylus, and paper (9). This intimacy provides “[a] media-technological basis of classical authorship that typewriting simply liquidates: ‘. . . [a]fter one briefly presses down on a key, the typewriter creates in the proper position on the paper a complete letter, which is not only untouched by the writer's hand but also located in a place entirely apart from where the hands work’” (203).¹¹ The charged, black-box-like space between the hands and their product that Kittler (via Beyerlen) focuses on here echoes the irregular, arbitrary space around the letters themselves as produced by the typewriter; in both cases, the technology of the typewriter introduces a dimension of

¹⁰ In seeing the visual rhythm of monospacing as a contingent, destabilizing force within typewriting, I differ from Darren Wershler-Henry, who considers it strictly a means of regimentation: “[t]his invisible grid is the essence of the disciplinary structure that typewriting applies not only to typewritten texts, but also to the bodies of typists and ultimately to larger society, adapting the world to its exigencies” (254). While I agree with the concept of adaptation that Wershler-Henry advances, I hold that this adaptation is one in which typists and “the world” adapt to a system that is not determined by any willful controlling action on the part of the machine, but rather by a fundamentally indeterminate and co-constitutive engagement between human and machine.

¹¹ Kittler's quotation here is from the work of German stenographer and typewriter dealer Angelo Beyerlen.

epistemological instability into the production of text. While the hands are separated from paper in the typewriting process, mediated by the machine's system of keys and typebars, this separation does not by any means necessitate that the body be damaged within—and moreover torn from—the writing process in the way that Kittler imagines when he describes early typewriting as “[a] type of writing that blindly dismembers body parts and perforates human skin” (210). Indeed, while the body is spatially separated from the inscription surface in typewriting, it is also more completely engaged in the process of inscription. Whereas handwriting uses only one arm and hand, thus engaging only one side of the body, typewriting engages both hands and thus both sides of the body. The bodily system of the typewriter is not a single isolated appendage but instead two paired hands working at once both independently and in collaboration; these hands are of course then extended and multiplied by their ten equally independent and collaborative fingers. This collaboration might also be understood in neurological terms, with the act of typing mobilizing both sides of the body and thus both hemispheres of the brain at once. Indeed, typing effectively poses a challenge to the validity of distinctions among left-handedness, right-handedness, and ambidexterity. While a typist might retain a preference for one hand when not at the machine, and even perhaps reveal that preference in particular habitual movements on the keyboard, it would be effectively impossible to function as a typist in an office environment without virtually full usage of both sides of the body at once. Thus the interface between human and typewriter produces a complex system of hyperembodiment, a constantly shifting configuration of hands and fingers, rather than the violent disembodiment Kittler suggests.

Changes in the technology of the typewriter also introduced a number of new configurations of the hands and the eyes over the course of the machine's history. Starting with the model introduced by Remington and Sons in 1874, the earliest typewriters available on the American market were "upstrike" machines: as the name suggests, typebars in these machines were hidden under the platen cylinder that held the paper in place against the carriage, and struck upwards against this cylinder to make their mark. As a result, it was impossible to see what was being typed as it was being typed; text only became visible after several more lines had been typed and moved the earlier text upwards into view. Upstrike technology dominated the marketplace until the Underwood Corporation's introduction of the first "frontstrike" machine in 1894. This technology allowed typebars to strike forward, thus placing text clearly in the typist's view as it was being typed. Gitelman suggests that "in removing the act of inscription from the human eye [upstrike technology] seemed to underscore its character as a newly technological and automatic event," but that "[s]cholars have overdrawn the history of the typewriter as a triumphant progress" from upstrike technology to frontstrike technology, and thus from "invisible" to "visible" writing (206). Her attention to the need to de-emphasize the dichotomy between these two periods is valuable for its critique of the somewhat disingenuous attempt to radicalize upstrike technology and normalize frontstrike technology. As she suggests, each mode of writing presents its own particular bodily orientation as central to textual production: "touch typing [on upstrike machines] vied with 'visible' typing in the construction of typing as a bodily experience, aligning it more with the sense of touch or more with the sense of sight. Inscription, in either case, might have little to do with the mind" (207).

However, whereas Gitelman's argument seems an attempt to collapse the dichotomy between the two modes of writing, I would suggest that the inverse relation is true, namely that both modes are not equally normal but rather equally radical. Thus upstroke writing is no less technological and automatic for being visible; on the contrary, it entails a complex and overdetermined bodily tension in relation to the machine. Prior to the introduction of the Selectric in 1961, the carriage on an upstroke typewriter moved the paper from right to left across the area where the typebars struck it. In moving one unit of space to the left for every character imprinted, the paper constantly opened up white space to the right of the characters already typed, thus resulting in text that could be read from left to right in the manner of standard English. However, during the act of typing, this text became visible from right to left as it was produced, in reverse of the direction of standard reading (although not in reverse of the standard ordering of the characters themselves). As a result of this reversal, any reading that took place during the act of typing—any self-monitoring or self-awareness with regard to the production of text—also had to take place in reverse. At the same time that the eye read text from left to right, it had to follow the flow of text from right to left to do so.¹² Pre-Selectric typing thus entailed a complex tension between the body's production of text through the hands and its immediate (re)consumption of that text through the eyes. These two processes were at once both part of a symbiotic feedback loop, inseparable from one another within the act of typing, and also at odds with one another over spatial territory and directionality. Capable of being processed by the eye yet counterintuitive to standard conventions of

¹² Although the introduction of the element effectively ended this reverse directionality of reading within typing, the overarching process still remains a noticeable feature of contemporary mediated text: the various news zippers of Times Square flow from right to left, as does their more recent descendant, the textual "crawl" at the bottom of the television news screen.

reading, frontstrike was spatially uncanny. As the frontstrike typist watched the letters he or she produced flow “backwards” in space, as it were, his or her perception was effectively inverted and reverted with every keystroke.

The Selectric brought about another change in the bodily relation between action and perception in the act of inscription. The Selectric revolutionized typewriter technology by replacing the discrete, single-character typebars used in earlier frontstrike machines with a single component known as an “element,” a moving type-ball with all of the characters of a given typeface embossed on its surface in order to be imprinted on paper. The choice of the word “element” for this piece of machinery prefigures Kittler’s use of the term to describe the fundamental components of typewriting, although it carries an opposite valence in its centrality to typing on the Selectric and the way in which it shifted the process of typing altogether. Indeed, the element constitutes the last of the vital breaks in the typewriter’s spatial technology, a third change in the bodily act of typing past the stage at which Kittler deems that act a circumscribed erasure of the human subject. By replacing typebars with the element as the means of inscription, the Selectric eliminated the bodily tension present in frontstrike typing. In moving in the same lateral direction as the writing hand, the element also moves in the same direction as the reading eye. This parallelism consolidates the body in space in a way that is absent in the operations of earlier machines. Advertising for the Selectric foregrounded this symmetry between body and machine: a 1961 advertisement claimed that “[s]kim[ming] across the paper (just as your hand does when you write), [the element] prints faster than the eye can see” (qtd. in DeLoca and Kalow 82). This promise imagines the element as analogous, yet superior, to the writing hand, capable of engaging in identical, yet faster,

lateral movement. Yet while the Selectric made the body and machine parallel for the first time in the history of the typewriter, this realignment hardly produced the McLuhanesque extension of the body that this advertisement's equation suggests in its tantalizing fantasy of renewed contact with the surface of inscription. Indeed, as much as the element served to approximate writing in certain ways, its very presence constituted a foreign intermediary between the body and the paper; with its rotational, three-dimensional operation, Selectric typing was as technological and automatic as upstroke typing, if not more so. Thus while the Selectric may have streamlined typing, making it more efficient, the technology it introduced was not a return to the normative bodily dynamics of handwriting. On the contrary, from its earliest incarnations, typewriter technology has instead produced a continually shifting sequence of spatial realignments of the body with regard to the production and perception of text.

In addition to the history of changing bodily alignments I have traced above, the typewriter posed another bodily problem through the keyboard, a component that retained a more constant form over time.¹³ Structured and standardized through the keyboard, the typewriter builds error into the act of writing. In contrast to the more open writing systems that precede and follow it in history, writing by typewriter is a process of largely irreversible selection from a limited set of options present within the predetermined space of the keyboard. Spelling becomes a newly important and problematic dimension of textual production within this context: because the typing of any given word stems ultimately from the options present on the keyboard, spelling on the typewriter is both a

¹³ Although a number of alternatives to the dominant QWERTY keyboard layout have been posed since the early years of the typewriter's existence, I see the differences among these layouts as variations on the single larger form of the keyboard, rather than as wholesale changes in and of themselves as in the case of the different inscription mechanisms outlined above. For historical discussions of keyboard layout, see Gitelman, 38-41; and Beeching, 39-42.

mentally determined response to learned rules and a physically determined sequencing of keys and letters. Misspellings and other irregularities within a typed text thus signify the possibility of abnormal physical movement as well as, and often instead of, errors in cognition or memory. For example, whereas the autocorrection software of computer word processing would be quick to transpose the text “hte” or “teh” into “the,” an uncorrected typewritten document retains these strange, defamiliarizing strings of characters.¹⁴ In doing so, it marks not only the technological limitations of the typewriter’s capability for self-correction, but also the instantaneous confusion in the timing of the fingers that occurs prior to any process of correction (or, in this case, in place of it). While “hte” and “teh” are superficially reducible to the same semantic meaning—a mistyping of “the”—each of them nonetheless records a different series of movements in space and time. These recordings, moreover, are insistently opaque encodings, as opposed to the automatically resolved marks of word processing or the ambiguous marks produced by handwriting. They provide a trace that is palpable, but not fully comprehensible. Textual irregularities on the typewritten page derive from a moment of contact between body and machine, but that contact itself cannot be recovered beyond the end action of striking keys in the order that they appear on the page, and cannot be reduced to a clear responsibility on the part of either human or machine. Thus “typos”—a term that I use with great hesitation in this context, given its loaded, pejorative connotation—speak of error in the language of error.

The dominant methods of correcting such error inevitably add a further layer of material dissonance and disruption to an already highly unstable text. Perhaps the most

¹⁴ This defamiliarizing effect, like much of what I discuss below, is a property of the non-correcting typewriter technology that dominated the marketplace prior to the introduction of the IBM Correcting Selectric Typewriter in 1973 (DeLoca and Kalow 141-143).

primitive and immediate method of type correction (if it can even be called correction) is the process of typing over an error with a string of x's and retyping the intended word so that, for example, "hte" becomes "~~hte~~ the." This action marks the error in a double, palimpsestic fashion, recording the process of covering and correcting the error rather than making it disappear from the page. Other methods of correction, such as corrective fluid, typewriter erasers, erasable bond paper, or adhesive corrective tape, render typewritten errors superficially invisible, yet nonetheless leave their own idiosyncratic traces; regardless of the method in question, the general problematic of error on the page persists as itself inerasable, impossible to excise wholly from the system of the typewriter. In this sense, then, typewriting is an intensely contingent mode of inscription as well as an intensely permanent one—indeed, a mode that renders the contingent dimensions of a text permanent. A typewritten text announces its own illusory completeness as a function of its mechanical origin at the same time that it presents the contravening imprecisions and irregularities that are an inextricable element of that same system of writing.

The embedding of error in the process of typing took place in the macroscopic space of the modern office as well as on the microscopic space of the page. Inseparably wedded to the typewriters that populated it, the office functioned as a space in which the errors produced in the act of typing could potentially be corrected, but could also be reinscribed, retained, augmented, multiplied, and circulated. The synthesis of standardization and chaos that the typewriter concretized and made visible is perhaps the

defining characteristic of the modern office.¹⁵ Changes in the demographic makeup and the technological infrastructure of the office over the course of the second half of the twentieth century further intensified this tension within the office and the texts that it produced. As the population of female office workers in the United States expanded during and immediately after World War II, a two-tiered hierarchy emerged within it, divided between the office's newly professionalized and permanent population of private secretaries and its newly flexible and transient population of pool typists. The interface between gender and technology provides one of the primary sites for the modern office's synthesis between standardization and chaos, and no discussion could address writing within the office properly without considering the dramatic transformation of the gender of office populations across the twentieth century. In recent years there has been increased scholarly attention to the question of women in secretarial and office positions and to the relation between women and typewriters in particular.¹⁶ While this conversation has provided important context for my own thinking, my consideration of the typing office pursues a different line of inquiry in which, rather than putting in place a system of either control or resistance or some combination of the two per se, the configuration of women and typewriters in the postwar office managed information and bodies in a manner that was unstable and highly indeterminate. The dynamics of staffing in the office exemplify this multipart complexity. While the position of secretary was generally fixed within time and space, with one woman assigned to work for one man on an ongoing basis, the office typing pool was composed of women who were more mobile

¹⁵ Alan Delgado notes that early businesses had a "general office [as] the nerve centre of the establishment," but that this space was often disorderly and "not designed for the work it had to undertake," and thus possessed a sort of flexibility by default as a function of its spatial limitations (91).

¹⁶ See, for example, Davies; Kittler; Kwolek-Folland; Price and Thurschwell, "Invisible Hands;" and Shiach.

and transient both within the office, performing work for any number of executives as the need arose, and within the workforce as a whole, often leaving their jobs on a temporary basis for marriage or childrearing.¹⁷ This dynamic interchange within the office population opened the space for the mistransmission of information at every step of the process of textual production and at every level of power. Thus while the overarching protocols of writing within the office were highly standardized—one office management handbook from 1947, for example, dictates that paper should move through the office “entirely in a forward direction” with “no turning back or crisscrossing” (“Use” 338)—the actual process of textual production, the configurations of typing bodies, and the working relationships and arrangements of the office could be far more complex and heterogeneous, changing on a sometimes hourly basis, as well as over longer periods of time, depending on changes in staffing and workload.

The multiple technologies of transcription available in the office compounded the complexity of these interpersonal transcriptive relations. Executives could dictate material in person to a stenographer or typist or to a dictation machine for later playback. Both of these options were in frequent use in most offices, with each one allowing for different forms of efficiency and accuracy. These points of flexibility within the process exponentially increased the possibilities for mistransmission with every new sequence of transcription and every new connection within such a sequence. Shorthand, a textual system that was closely intertwined with typing and often found a place within both in-person and machine-mediated dictation, added another potential layer of transcription to the writing system of the typewriter. As Gitelman suggests, shorthand is itself a technology, one whose systematization destabilizes writing similarly to the structures of

¹⁷ See Hedstrom for a discussion of these patterns.

the typewriter, opening up questions of “what should as well as what *could* be represented on the page. . . . what kind and what range of movement needs to be represented, for what purposes, and for whom?” (25, 27-28, emphasis original). Like the typewriter with its promise to provide immediately the authority and credibility of printed text, shorthand offered an intermediary that could help channel information from voice to type seemingly “verbatim” (qtd. in Gitelman 41 and passim in Chapter One). Yet while shorthand’s “discipline vouched for accuracy, [its] exertion undercut probable objectivity” (33), entailing a bodily labor that inevitably opened the way to ambiguity. In a 1942 office management manual, George Darlington equivocally notes in relation to this paradox that “[t]o some extent the dictating correspondent is responsible for grammar and punctuation, but the stenographer should be able to catch and eliminate all gross errors” (236). Darlington’s claim places shorthand squarely within the typewriter’s ambiguous system of authorship, imagining its influence upon exactitude as at once both “gross” in scope and diminished “to some extent” by the original dictator. Moreover, it illustrates the ways in which the office’s production of standardized text both depended upon and produced a decentralized authorial network that could not help generating textual errors in the interstices between the various technologies and bodies that comprised its different sites of information storage and reproduction.

As irreducible dimensions within the writing of the postwar office, error, ambiguity, and mistranscription were the signs of a process of textual production based not on any individual style or level of proficiency, nor on any single moment of possession of a document, but rather on the movement of information through different physical spaces, registers of power, and technological mediations. At both the

microscopic and macroscopic levels, the systematization of textual production that inhered in the typewriter and in the office that contained it influenced writing in ways that often refused that systematization and reversed its effects. The specific impact of these forces is impossible to trace from the final typewritten iteration of any given document with any accuracy or with any discernible relation to previous or subsequent samples. Each document produced by the typewriter, each piece in the massive archive of postwar corporate discourse, exists as the unique record of an individualized sequence of body-machine interfaces and technological inscriptions; while its particular errors might help to differentiate it, they can never fully clarify or contextualize it.

“How are we going to write ‘Oouh’?:” Error, Transcriptive Undecidability, and the Leftover Typists of Andy Warhol’s *a*

For Kittler, the rise of the typewriter signifies the end of writing and human subjectivity in general, but also the end of the more specific subset of text conventionally described as literature. Tracing this break, he compiles “a register of the literary desk couples of the century” (214), groupings of textual laborers ranging from Henry James and his typist Theodora Bosanquet to Adolf Hitler and his staff of stenographers. He sees these collaboration as constituting data processing rather than aesthetic production: “[m]echanized and materially specific,” he claims, “modern literature disappears in a type of anonymity” (226), with even what might otherwise seem highly, even centrally literary texts colonized by the office, the desk, and the typewriter. Kittler’s dramatic re-reading of modern literature serves to make a strategic claim on our conception of the literary under the sign of modern information technology. In his estimation, much as we

still exist within living bodies but are no longer human,¹⁸ books continue to be produced and consumed through media technology but no longer consist of the “philosophical dreams of infinity” (15) that characterize literary language. While I see such a critique as overly deterministic and pessimistic, in its totalizing stance it paradoxically points towards a provocative question: what would a literature written wholly by the modern office look like? What would it mean for the typewriter—not the unique, solitary typewriter of the heroic author, but rather the multiplied, networked typewriter of the office transcription system I have discussed above—to be an integral, palpably present factor in the production of the textual content of a novel? What would it mean, in other words, for the physicality, interpersonal distribution, and transcriptive error that are intrinsic to the typewriter as a writing system to be similarly intrinsic to the writing of literary text? Taken to their logical extremes, these scenarios suggest that any attempt within literary discourse to register the unstable dynamics of postwar typewriting must take place through material that depends on precisely those dynamics for its very existence; only a document that retains the spatial and textual irregularities of the typewriter can present the work of the machine in a meaningful way.

This is the problem that Warhol addresses in *a*, a novel that both rehearses and explodes the circumstances of the modern office as a system for producing text. *a* consists of roughly twenty-four hours of conversations among the members of Warhol’s Factory studio, taped by Warhol with a portable cassette recorder, transcribed on typewriters by four women, and published as a constant stream of unedited, unproofread text. In turning to *a*, I intend to provide a diagnostic example of how the transcriptive

¹⁸ A number of critics have provided responses to the rise of posthumanity that are more productive and progressive than Kittler’s, while still remaining responsible to the tectonic shifts in subjectivity wrought by information technology. See Bukatman; Haraway; and Hayles, *Posthuman* for several seminal examples.

mechanics of the typewriter and the office might allow for an interrogation of textual authorship and aesthetics along lines that are both more unstable and more productive than the “tautology of technicians” (14) that Kittler sees as the only possible product of typewriting. *a*’s conditions of production are its most salient feature: the taping and transcription of the novel’s material provide a uniquely problematic object of study. Yet it is readily apparent that these conditions are conceits rather than strictly held rules. Although the novel contains roughly twenty-four hours of material in a constant stream of text, these hours are not consecutive in the way that they are presented to be. Warhol notes of the process of taping for the novel, “I was determined to stay up all day and all night and tape . . . [b]ut somewhere along the line I got tired, so I had to finish taping the rest of the twenty-four hours on a couple of other days. So actually, *A* [sic], my novel, was a fraud, since it was billed as a consecutive twenty-four-hour tape-recorded ‘novel,’ but it was actually taped on a few separate occasions” (*Philosophy* 95).¹⁹ Likewise, the conceit of four female typists—indistinguishable on the page and anonymous at the time of the publication—as the sole transcribers of the novel is also a deception. Victor Bockris states that “Warhol chose a bevy of (mostly) women to do the vital work” of transcription, and names Paul Katz as one of the transcribers in addition to Maureen Tucker, the drummer for the Velvet Underground; Susan Pile, a Factory worker; and “a couple of high school girls” (“Writer” 18-19).²⁰

Yet the “fraudulent” nature of these aspects of the novel’s production has relatively little impact on its form or the argument it presents. Although several

¹⁹ In a glossary afterword to the 1998 printing of the novel, Victor Bockris notes that there were actually five separate recording sessions, stretching from August 1965 to May 1967 (453).

²⁰ The mention of Katz, and indeed of any male typists at all, is notably absent from Bockris’ 1998 afterword.

characters make references to the different temporalities and taping sessions within the narrative, the paratextual apparatus of the novel (what Warhol refers to as its “bill[ing]”) makes no mention of it, and moreover, this temporal discontinuity produces no more or less narrative fragmentation than any other formal element of the text. Similarly, the ambivalent parentheses Bockris places around the “mostly” that qualifies the book’s all-female typing staff and the feminine connotations of “bevy” suggest that if that staff were not entirely—or, perhaps, (entirely)—female, it was nonetheless intended to be understood as such. Thus the novel functions less as an inquiry into time as a general social convention (i.e., the division of the day into twenty-four hours) than as an inquiry into how the specific labor of information production divides, apportions, and occupies time through different technologies. It is not an experiment with the strict deployment of women as typewriters, but rather with the bodily ambiguities and interminglings produced within the office’s gendered space of textual production. Indeed, as an incomplete performance of a certain mode of documentation and transcription rather than an actual, airtight undertaking of that mode, the novel underscores the contingencies of tape and type even more dramatically—while it is not a text that is rigorously materially *composed of* typewritten transcription and the anonymity of embodied technological textual labor, it is without a doubt a text that is *about* those issues, precisely because it does not strictly adhere to the rules it purports to set for itself in relation to those issues.²¹

²¹ This sort of “fraudulent” production of a limit-text is not unique in Warhol’s work. In reference to his 1963 film *Sleep*, an ostensibly continuous eight-hour record of the poet John Giorno sleeping, Warhol himself recalls that “I thought, ‘Maybe it’s time to do a movie about somebody who sleeps all night.’ But I only had a camera that had three minutes on it, so I had to change the camera every three minutes to shoot three minutes. I slowed down the movie to make up for all the three minutes I lost changing the film, and we ran it at a slower speed to make up for the film I didn’t shoot.” (*Philosophy* 95). Warhol’s then-assistant Gerard Malanga offers the diametrically opposed explanation that the film was a loop rather than an extension: “Andy duplicated an additional ninety minutes from an equal ninety-minute section of the film

Thus when I refer to the typists as an all-female group, or to the novel as having a twenty-four hour duration, in the following discussion, I do so for reasons of rhetorical strategy as well as convenience in explication; my reading will push against these deceptive “unities” of the text as a way of playing out the project of simultaneously imagining and dismantling technological and authorial systematization that Warhol pursues through the novel.

Warhol’s importance as an artist and a figure within postmodern culture is well documented.²² By considering Warhol as a typewriting author, then, I intend both to situate his characteristic practices within the context of a different medium and in doing so, more importantly, to consider the implications of those practices for literary authorship and aesthetics more broadly. The typewriter is a central (if often invisible) force within much of modern literature, a subject for some authors (T.S. Eliot’s “typist home at teatime” in *The Waste Land* [45], for example, or Mina Harker’s secretarial transcriptions in Bram Stoker’s *Dracula*), a source of inspiration for others (perhaps most famously James in his later years), and undoubtedly a *de facto* means of production for countless others.²³ Most literary texts that engage typewriting exemplify what Rubén Gallo describes as mechanographic writing, “in which . . . interest in the typewriter is purely thematic” (97). Warhol’s novel, however, exemplifies “mechanogenic writing, a form of writing that [is] not merely *about* typewriters but *shaped* by the machine” (Gallo 114, *emphases original*). Yet *a* also extends the typewriter’s radically “desublimatory

to stretch it out to eight hours to approximate the scientifically accepted length of time for normal sleep” (39).

²² A full consideration of Warhol as a central figure in postmodern art and aesthetics is beyond the scope of this chapter. For crucial (if largely oppositional) examples of this critical conversation, see Danto and Jameson 8-16.

²³ On typing in Eliot, see Price and Thurschwell, “Invisible Hands” 1; in Stoker, see Kittler, Fleissner, and Wicke; in the work of James, see Bosanquet.

effect on writing” (Gallo 101) by using the machine not only to narrate, theorize, and perform its own effects within literature but also to record the unmediated transcriptive work of the typewriter as literary material in and of itself. Warhol’s novel offers an aesthetic capture of the operations of the modern typing office, a blank polyphony that documents the bodies and machines of the office in their own dissonant idiom. By retaining mistranscription, misspelling, misattribution and numerous other forms of error in the text of a novel, Warhol makes the limits of typewritten transcription visible within the domain of the literary. In *a*, the aesthetics and protocols of office production and literary authorship fuse, interrogating and supporting one another in ways that raise questions about the spatial, bodily, and procedural dimensions of writing within the multiply mediated environment of postwar culture.

The text of the novel, originally presented with very little contextualizing information and demarcated only by breaks indicating different sides of the tapes used and irregular labelings of speakers, is a highly discontinuous document at all levels. The layout of the text shifts forms at random, words are misspelled and seem to be left out on a fairly frequent basis, punctuation is irregular, and indications of who is speaking come and go and change format without explanation. The narrative of the novel, such as it is, is equally disjointed, with a constantly changing mass of characters gossiping, listening to music, taking drugs, and traveling around New York City without any larger direction. Warhol himself, who goes by the alias of Drella in the novel, remains largely laconic and even silent for long stretches, while Ondine, the star of Warhol’s 1966 film *Chelsea Girls*, dominates much of the conversation that makes up the novel’s text. *a*’s narrative events often invoke the media system surrounding the text and the Factory in general.

Indeed, the work of the Factory seems to be less the production of art objects (even in the Warholian sense) than the mediation of information; the narrative world that the *American Poetry Review* describes as “the life of aimless conversation and waiting around” (45) is, more specifically, a life of waiting—often in vain—for information and media technology to arrive clearly and concretely. Many recurring plot elements, moreover, center on ways in which mediation is absent or non-transparent: Ondine and Drella miss the delivery of a video camera at the Factory, Ondine leaves a beloved record by the opera singer Maria Callas behind in his travels, and various characters misdial phone numbers or are answered with busy signals (“I just dialed the hospital again and I got information” [157], one unattributed voice tellingly complains). In foregrounding the instability of information as it moves across the network of the Factory and of contemporary media culture in general, these events resonate and converge with the novel’s formal confusions, producing a text in which the mistransmission of information is often itself mistransmitted.

With its disjointed, syntactically difficult narrative, its thematic concern with information technology, and its profoundly technological mode of production, *a* sits at the intersection of two artistic trends of the late twentieth century, namely the discursive, formal, and ontological play of high postmodernist fiction and the reproductive, found-art images of postmodern pop artists such as Roy Lichtenstein, Robert Rauschenberg, and Warhol himself. Indeed, *a* generates a number of characteristically postmodern textual effects—what Brian McHale describes in terms of “‘alloverness,’ a flood of stimuli all of equal importance, lacking hierarchy or syntax” (*Postmodernist* 160) and “deliberate nonfluency: the construction of sentences so awkward (to the point of ungrammaticality)

that it is the sentence-structure itself that fixes the attention” (*Postmodernist* 154)—through precisely the same sort of technological focus that underlies the mass-production used to produce visual art in Warhol’s Factory studio. Moreover, *a* shares its concern with media technology not only with Warhol’s visual work but also with the work of a number of formally experimental postmodern writers, including but not limited to John Barth and William S. Burroughs. In this sense, its highly mediated formal experimentation stands in almost diametrical opposition to Jack Kerouac’s approach to the typewriter as a transparent conduit in the writing of *On the Road*. *a* replaces the “spontaneous bop prosody and original classic literature” (Ginsberg 3) of Kerouac’s novel with the prerecorded “aimless conversation and waiting around” of the Factory, posing a sort of typographic bookend to “the long sixties, extending from the late fifties to the early seventies” that Marianne DeKoven sees as the timespan for the emergence of the postmodern (3).²⁴

However, the techniques that Warhol’s novel employs are subtly yet crucially different from both the literary strategies of these authors and his own visual strategies. *a*’s mode of production replaces the reproductive work of the Factory’s silk-screening with the transcriptive work of an office within that Factory; these techniques involve neither the overdetermined technical constraints used by Barth nor the randomized cut-up and fold-in techniques used by Burroughs, but rather something in between and outside of both categories.²⁵ Indeed, Barth and Burroughs draw on a tradition of literary

²⁴ As I note above, Kerouac’s “spontaneous” scroll typescript for *On the Road* was itself the product of years of planning and organization, and contains numerous cross-outs and rewritings. Such a reality suggests that the popular narrative of the Great Man producing pure expression through his Great Machine that the novel’s mythology sponsors ultimately covers over the realities of technological writing’s material friction rather than contesting them; see Kerouac and Nicosia. For a closer consideration of typographic relations between Kerouac and Warhol, see Wolf.

²⁵ See McHale, *Postmodernist* 156-161 for a discussion of these literary strategies.

technique rooted in the 1960s avant-garde and the experimental inventions of high modernism. While their work has aleatory dimensions, it employs them towards an authorial practice that is largely deliberate and individuated. *a*, by contrast, locates aesthetic innovation and friction in the collective banalities and accidents of the typing office, producing experimentation from the preexisting circumstances of clerical labor rather than from literary conceit. Viewed along these lines, it participates within a genealogy of what Alan Liu calls “destructive creativity,” in which “the office . . . becomes the target of iconoclastic art” via “a destructivity that attacks knowledge work through technologies and techniques internal to such work” (331). Although *a* avoids the directly oppositional approach Liu imagines, the dissonance it reveals within the typewriter-system might nonetheless be seen as a similarly internal critique of the practices of technologized information labor, drawing connections between the working protocols of the literary and the clerical.

Given the ways in which *a* tests readerly stamina and aptitude without offering much in the way of traditional literary compensation, critical reaction to Warhol’s novel at the time of its publication was for the most part predictably harsh. While some reviewers saw the novel as having merit in its implicit claims about language,²⁶ most dismissed it outright: a critic for *The New Yorker* called it “a totally boring jumble” (“*a*” 82), and Sally Beauman’s review for *The New York Times* critiqued the book’s documentary project as an authorial failure to generate narrative development or even readerly interest. Beauman saw *a* as Warhol’s imposition on the reader to “struggle

²⁶ Paul Carroll’s discussion of *a* is an example of this minority reaction to the novel: “At first, *a* strikes readers as a bore. . . . But gradually . . . it becomes obvious that this is how most people actually sound when they talk with one another . . . the blablabla that surrounds us every day and often far into the night” (44).

through the 451 pages of *Ondine*; at the end we will be left, like [Warhol], with just . . . *Ondine*” (32, ellipsis original). She objected to the novel’s mediated construction as much as to its central character:

Ironically “a” is not ultimately even realistic. Most of it—I suspect because the tapes didn’t pick up connecting pieces of conversation—is incomprehensible snippets and gobbets of talk. Because *Ondine*’s brain seems irretrievably addled with amphetamine, most of what he says takes the form of grunts, squeals, and bad puns. It’s frightening to think one can be bored by this sort of willful self-destruction, but one can. On film, Warhol’s people live; they evoke responses; pruned down to a transcript they lose all identity, they all sound alike, they evoke nothing, not even compassion.²⁷ (32)

Reactions such as these make clear the readerly expectations of comprehensibility and narrative development against which Warhol positions *a*. In this sense, as Craig Dworkin notes, the novel’s “explanatory subtitle”—*a novel*—“might be understood as an attempt to establish a ground against which the project as a whole can be better understood (or against which the knowing deviations from the defining conventions of the novel can at least be registered)” (“Whereof” 47).²⁸

²⁷ It is significant that Beauman understands the novel’s failure in relation to Warhol’s films. Although she considers them no more popular or enjoyable than *a*, she sees their claim on the real through mediation as more effective: “Sure, no one can have sat through the full 24 unblinking hours of ‘Empire State Building,’ or the 8 or so hours of ‘Sleep,’ but the idea of the films was challenging: they threw down a jokey gauntlet to all the old sacred accepted ideas of realism” (4). Warhol did in fact express a desire to produce the novel as a film. While such an impulse raises the possibility of moving the same information through yet another space of mediation, he imagines it along different aesthetic lines from those Beauman suggests, namely as a way to produce an object of cinematic star imagery and self-revision rather than as an investigation into the mediation of the real as such: “All I wanted was for someone in Hollywood to buy the rights [to *a*], so *Ondine* and I could see great-looking actors like Troy Donohue and Tab Hunter playing us” (*POPism* 287).

²⁸ Dworkin’s reading echoes Danto’s claim that Warhol’s visual art “reveal[s] as merely accidental most of the things his predecessors supposed essential to art” (459).

As Dworkin's conception of the novel's subtitle as a deliberate announcement suggests, the unreadability that the contemporary reception charges *a* with is neither a shortcoming nor an indirect consequence, but rather the desired effect that Warhol seeks through the novel's complex production system. This system is designed to generate a productive and provocative undecidability rather than a refusal of readability or reading altogether. The indeterminacies of mistranscription and typographical error provide a textual manifestation of the narrative misconnections, miscommunications, and missing information that define working life within the media system of the Factory; thus the novel's readers, implicated within this system of technological undecidability, must labor under the same conditions of incomplete comprehension as its characters. In addition to evoking this local ambiguity of the novel's narrative world, *a*'s form also makes a broader argument about the writing technology used to produce it: in retaining and foregrounding the confusing, challenging fabric of the typists' unedited transcripts, Warhol suggests that the discrete spatial characters of the typewriter produce greater specificity than other writing systems at the level of the letter, but not necessarily greater clarity or precision at any broader level of meaning. He says of the novel, "I wanted to do a 'bad book,' just the way I'd done 'bad movies' and 'bad art,' because when you do something exactly wrong, you always turn up something" (*Philosophy* 287). Within such an understanding, the transcript's divergences from typographic, orthographic, and narrative convention are not easily dismissed evidence of incomprehensibility as such, but rather the most jarringly apparent traces of a complexly distributed writing process in action, a process, moreover, that demands to be read and comprehended along different lines. Warhol's desire to "turn up something," then, refers to two related dimensions of

the novel. Firstly, the production of a “bad book” “turn[s] up something” in the sense of a claim to generic innovation and revision: by saturating *a* with the orthographic and semantic confusions that Dworkin describes as “knowing deviations” from novelistic convention, Warhol offers a model for an extreme expansion of the categories of the novel and the literary in general. Warhol’s allusion to turning up also highlights the more specific, and indeed fundamentally technological, amplification that this expansion entails, increasing both the potential for and the persistence of ambiguity within the text by making mediated transcription the central operation of its production. By foregrounding ambiguity in this way, Warhol produces a series of moments within the text in which the material and physical contingencies of technological mediation come to bear upon the act of writing in a manner that circumvents traditional literary aesthetics to present a mode of writing that directly records its own modes of technological inscription and mediation rather than reflecting upon them thematically or discursively.

The novel’s cryptic title provides its first and most conspicuous instability. In the original 1968 printing, the title appeared as a single monumental letter in black on a white background. Occupying almost all of the space on the book’s cover and appearing again inside the book on its frontispiece, this initial, iconic letter provides a textual equivalent of the iconicity of images that so often dominates Warhol’s canvasses.²⁹ This giant “a” furthermore announces the novel’s fundamental nature as a material text about material text, suggesting that its most important characters are not the human ones whose voices it transcribes, but rather the alphabetic ones that make up the transcript itself. Given this initial announcement of the novel’s typewritten focus, the use of the letter “a” in

²⁹ The cover of the 1998 reprint diminishes this focus on the typographic character: a color self-portrait by Warhol takes up most of the cover’s space, while the titular character floats in space over a trademarked reproduction of Warhol’s signature.

particular suggests several possible meanings. Bockris notes that according to Billy Name, the photographer and foreman of Warhol's Factory, the title is an homage to e.e. cummings, and refers more specifically to amphetamine, the drug of choice in the Factory at the time the novel takes place ("Glossary" 453). These explanations suffice at the level of content, but the novel's form begs the question of other readings of this crucial single letter. Perhaps the most fundamental and certainly the most obvious of these is that a is the first letter of the alphabet. Thus in choosing a single initial lower-case letter as a title, Warhol at once both underscores the centrality of typewriting to the novel and gestures towards the inevitable incompleteness of that writing; this introductory title begins a message, a string of characters, that by its very nature can never be full and complete. A of course stands for Andy, but Warhol's presence in the text as a recorder more than as a speaker (as well as the fact that he goes by the nickname Drella in the text) makes it difficult to consider the title self-reflective in any clear sense. Quite the opposite, the title invokes him in a fashion that is at once oblique and explicitly orthographic: because Warhol's full given last name was Warhola, the a of the title names him from the other end of the text, as it were, with the novel's first letter also serving as Warhol(a)'s last. Thus reading across the novel's author and title—Andy Warhol *a*—produces a textual image of Warhol as at once both completed and distorted by the impact of the typewriter, almost as if literally marked by its keys. This implied completion of the name in turn implies completion of the body, although neither can be fully realized—the italic *a* of the title, at once both initial and final, hangs like a restored appendage that the body never finds a fixed location for, or even wholly accepts. The titling of Warhol's novel imagines the body and the typewriter as coexistent and co-

present producers of textual information, physically distinct from one another, yet connected in flickering moments of indeterminacy that might extend no further within the text than the space of a single elemental character.

This spatial indeterminacy of a single character finds its macroscopic counterpart in the constantly shifting page layout of the novel. Although the novel is a transcript in the sense that it contains a written record of speech and other sound on Warhol's tapes, it frequently presents this sonic information in formats that diverge from the spatial conventions of transcript formatting as visible in legal or journalistic documentation. By changing the novel's layout back and forth between such a conventional transcript format and numerous other formats that use multiple columns and shifting white space, Warhol and his typists make clear that the typewriter arranges and marks the page in spatial terms over and above linguistic or temporal terms. Distributed on the page in these different forms, the words of the novel's personae register as units of information that occupy space character by character, word by word, and line by line, without these configurations necessarily having a clear relation to the content they hold. The most frequently occurring example of this arbitrary spatial division is the novel's two-column layout, which first appears on page six. After three lines of transcribed sound (which I discuss further below), *a* begins with a straight transcript almost completely devoid of line breaks: as if the typist were attempting to minimize space between words and character's lines, the novel's text occupies the entire width of the page, running from one margin to the other in this first section, with changes in who is speaking indicated only by tabbed paragraph spaces.³⁰ The novel then abruptly shifts to a two-column layout in the middle of page six

³⁰ As I have suggested above, it would be effectively impossible to discern the identity of the typist who transcribed any given section of *a*. Thus I will use the term "the typists" to refer to the group as a

without any meaningful reason. This format does not present two simultaneous streams of speech or the alternating speech of multiple characters, nor does it intrinsically allow the space of the page to hold any more text than a conventional transcript format (and it certainly holds considerably less per page than the spatially condensed format that opens the novel). It instead charges the surface of the page by dividing it, foregrounding the typewriter's role as a machine for rationing that space. Faced with this spatial division, the reader must effectively read the space of the page twice, skimming over each column one time. This motion forces the eye to move in a more mechanical and mechanically regimented fashion than it would in reading a traditionally arranged novel, thus causing it to echo the predetermined movements of the typewriter carriage and the element.

Moreover, because more of the novel appears in the two-column layout than in any other single format, this format effectively becomes the default against which other formats stand out; thus by explicitly producing white space through the bisection of the page, this format implicitly raises the inverse question of the presence and the effect of white space in other formats within the novel. Viewed in the context of this default format, the sections of the novel that take the form of a conventional transcript feel more spacious, indeed more spatially determined, by comparison. This effect is visible in a conversation between Ondine and the Factory photographer Stephen Shore, in which Ondine begins to offer Shore advice on "HOW TO BECOME A PROFESSIONAL HOMOSEXUAL:"

Is this plugged in?
Uh no, but maybe we can.

generalized whole, and "the typist" (in the sense of the typist in question) to refer to the woman who transcribed any single moment in the novel. The inseparability of the four bodily subjectivities that this second term must cover is central to the problematic of authorship in the novel.

I guess it's plugged in. It's working. We just saw Wee Carter-Pell and Bedroom Billy and somebody else in uh Stark's and uh . . .

You're going to give me your lesson now?

Tell me what you want to know.

Oh well . . .

What's troubling you?

All right.

(O) The oracle is open.

The oracle is open?

The oracle is open. What do you wish to ask the oracle?

Oh, I don't know. (17)

In contrast to the textual density of margin-to-margin and two-column transcription, the novel's moments of conventional transcription such as this one begin to resemble the script of a play rather than the text of a novel in their relative spaciousness. Yet what is at stake here is ultimately not generic distinction but rather the ways in which the typewriter can manifest both the presence and the absence of text on the page. Factors such as the speed of speech or of interchange within the conversation have no bearing upon the relation between text and white space on the page. Instead, the spaces to the right of each line of spoken conversation fluctuate in length dependent upon the relation between the typewriter's production of textual space in that line and the predetermined width of the page. Thus these spaces—irregular in length but nearly all considerably sizeable—function as repositories of textual silence that bears no direct relation to sonic silence. In the context of the novel's more nontraditional layout formats, these spaces, seemingly merely the function of the convention of aligning printed text on the left-hand side of the page, become newly visible as attenuated extensions of the equally arbitrary space produced around the individual characters of monospace type. The novel's sections of traditional transcription come and go fairly quickly amidst the more common and more extensive sections of other formats, a fact that would almost seem to suggest that they

were crowded out by the greater textual density of those formats. Yet their relative rarity serves precisely the opposite function: more noticeable precisely because they are less common, these sections foreground the embedded nature of textual silence throughout *a*, even and especially in its less immediately apparent forms—the novel’s paragraph breaks, the space between columns in its two-column sections, and indeed even around individual letters themselves.

This embeddedness is also clear in the first instance of conventional (or rather near-conventional) transcription in the novel, which begins with Ondine remarking to Drella about his not having ever met Merce Cunningham or several other people:

I, I, I don’t know any of these people; I met them only at sort of a uh, associatively and friends of Binghamton Birdie, who was, when I was with Binghamton Birdie.

What were you with Binghamton Birdie?

(O) I was Mrs. Birdi.

(D) You were Mrs. Birdie?

I WAS THE SECOND MRS. BIRDIE?

Awful. Who was the first Mrs. Birdie?

Yetta Blini.

Oh really? You’re kidding?

Yes and the other day she was at the Factory.

Oh.

Oh with . . .

Really, yeah.

Step Stubble. My dear, I have never seen anybody run in my life.

Oh really?

She ran down the stairs and I didn’t know it was her.

Oh. (12-13)

If the operative generic comparison in the previous example was the format of a printed play, this text in turn visually resembles a poem or, at certain moments, a dramatic conversation in metered verse. Yet as in the case of Ondine’s conversation with Stephen Shore, the distribution of text across the line here neither represents a clearly set rhythm of speech nor carries any sense of the arrangement of language towards a poetic end.

Without recourse to Warhol's original tapes, it becomes effectively impossible to evaluate the alignments of text in this (or any) passage with regard to how, if at all, they relate to the rhythm and pace of conversation. In the absence of any such clear and direct correlation between speech and transcribed text, text and space hover around one another in an indeterminate, arbitrary fashion. Indeed, throughout Warhol's novel, text marks space rather than time, and the typewriter's production of space on the page takes the place of any possibly clear and direct correlation between speech and transcribed text, a change that is visible both directly in sections with irregular alignments such as this one and indirectly in sections with traditional transcription such as the one discussed above. Warhol uses textual layout in *a* to isolate space as one register through which the moving body of the typewriter generates meaning. Moreover, by providing a number of different spatial configurations, almost as if in an effort to catalog the spatial capabilities and limitations of typewriting—what Gitelman describes as the “writing [of] space”—he defamiliarizes this writing in two ways. On one hand, Warhol points to the presence of flexible textual strategies within perhaps typewriting's most banal form, namely the transcription of preexisting material, while on the other hand he suggests that these strategies (and, equally importantly, the meaning generated by them) are largely arbitrary, regulated by the preexisting spacing functions of the machine, and thus in large part quite literally out of the hands of the typist.

Of course, the impenetrability of the typewriter's spacing mechanisms hardly means that the body of the typist plays no direct role at all in the production of typewritten text. On the contrary, the novel's jarring divergences from discursive convention depict the opaque, constantly shifting relations between its typing bodies and

typing machines. These moments of explicitly transcriptive writing exist in constant tension with moments in which the typists seem invisible and even absent, almost as if the novel were a Kittlerian product of the tape recorder and typewriter alone, with no human intervention at all. In this latter kind of moment, the problem of writing is a wholly technological one, seemingly unmediated in its multiple mediations, with the typewriter “playing back” the material on the tape in textual form. The first lines of *a* exemplify this version of the problem through the way in which they articulate the limitations of technologically mediated writing in accurately reproducing the sounds it transcribes:

Rattle, gurgle, clink, tinkle.
Click, pause, click, ring.
Dial, dial.

ONDINE—You said (*dial*) that, that, if, if you pick, pick UP the Mayor’s voice on the other end (*dial, pause, dial-dial-dial*), the Mayor’s sister would know us, be (***busy-busy-busy***). (1)

Standing at a pay phone on a New York street, Ondine swallows a handful of amphetamines and unsuccessfully attempts to call his friend Rotten Rita, who also goes by the name of the Mayor. His actions are as difficult to transcribe and to read as they are for him to carry out. How quickly do the sounds in these lines follow after one another? At what pitch are the “clink” of Ondine’s pill bottle and the “ring” of the dial tone? How long does each “dial” on the rotary phone take? Lacking attention to issues of frequency, timing, and simultaneity (as well as any number of others) that are central to this material on tape, the text of this typewritten transcript is markedly incomplete, incapable of reproducing even this most banal sonic information. Of course, these dimensions are present in speech as well as in the sound of inanimate objects, and thus while it is somewhat more comprehensible than the first three lines, the transcript of Ondine’s first

words is ultimately no more faithful to the source tapes. The text can at least partly capture the repetition present in unrehearsed conversational speech—Ondine’s almost stuttering “that, that, if, if you pick, pick UP”—but it cannot transcribe the simultaneity of Ondine’s speech and the sounds of his actions—“(dial),” “(dial, pause, dial-dial-dial)” — as they occur and are recorded on tape.

Thus at its outset, Warhol’s novel seems to play out what Kittler considers to be the crucial dividing question of modern media technologies. For Kittler, while the typewriter’s capacity for information storage is limited to “the finite and arranged stock of its keyboard,” the phonograph—a technological precursor to Warhol’s portable cassette deck—is unique in its ability to record virtually everything, “all the noise produced by the larynx prior to any semiotic order and linguistic meaning” as well as “the physiological accidents and stochastic disorder of bodies” beyond vocal expression altogether (16). These first lines of *a* would seem to substantiate Kittler’s claim: the typewriter’s attempt to reckon with the problems of sound through textual manipulations such as capitalization, boldface text, italicization, and parentheses falls far short of the scope of the tape recorder, failing to convey the complexity and density of Kittler’s (admittedly idealized) “noise of the real” (14).

Yet as the conversation between Ondine and Drella continues, the novel begins to register the unique internal problems of the typewriter as an inscription technology operating in conjunction with the human body. Punctuating the transcript, these irregularities refuse classification as either incidental effects of the typewriter or direct transcriptions of recorded sound. Several lines after his first attempt at a call, Ondine contemplates taking a cab across Central Park before trying to make another phone call,

asking Drella, “[a]re there diffERent places” where they could call Drella’s answering service (1). This capitalization of the middle syllable of the word “different” presents a markedly different manipulation of text from that of the earlier capitalization of “pick UP” or Ondine’s question of “[i]f we go through, through the park, is there ANY place we can keep calling[?]” (1). It is both visually irregular, occurring in the middle of the word, and sonically irregular, as if suggesting an unusual rhythmic emphasis. Another instance of this effect several pages later makes clear what is actually at stake in these modifications. As Warhol and Ondine search for somewhere to have breakfast, Ondine remarks, “[o]h there must be some restAUrant” (3). Close attention to the layout of the typewriter keyboard reveals that while this textual irregularity could be an accurate transcription of an unusual vocal inflection or of a distortion in the recording, it could just as likely be a record of the typist’s hand accidentally striking the caps lock key as it struck the “a” key, and not releasing the caps lock until after striking the “u” key. In contrast, Ondine’s comment that “[i]f there’s any kind of subterfuge [he has] to use, it has to be very obvious nad very funny” (3) fits more clearly in the category of bodily typographic error in its uncorrected confusion of the sequence of letters in the word “and.” Yet the novel’s lack of explicit differentiation between these different kinds of modification of text makes it impossible to tell which is in play at any given time, thus producing irreducible undecidability through its technological mode of production.

By publishing the typescript of the novel, complete with these ambiguities, as the final version, Warhol uses the text to invoke typewriting as a profoundly bodily production of semantically opaque information, an irreversible generation of marks through a series of bodily movements and moments of contact with the machine. These

errors are not only “the most important parts of the book” (Perreault 63), but also some of its most clearly typewritten parts. They trace the incomplete, random process of transcription, presenting bare, defamiliarized marks gesturing not towards any “noise of the real” present within the original event, but rather towards bodily action that can never be fully or definitively retrieved or reproduced. Thus Warhol shows that the typewriter’s distinctive capability is paradigmatically not to record “the physiological accidents and stochastic disorder of bodies” in a wholesale fashion, but rather to present the end result of those accidents and that disorder at a remove, encoding them through the space of its keyboard such that they are perpetually just out of the grasp of comprehension, chance movements that can only be fully re-accessed by chance. Once present in the final printed version, these typographic confusions cannot be filtered out of the reader’s sensory and aesthetic experience in the way that sonic or visual noise can be diminished in postproduction or ignored by the trained ear or eye. They must instead be encountered and assimilated by the reader (to the extent that they can be) in order for him or her to continue following the flow of the novel’s text. As the reader becomes more skilled at assimilating these confusions over the course of the novel’s 451 increasingly fragmentary and opaque pages, he or she consequently absorbs less and less of the actual textual material of the novel. Cognitively eliding these confusions, skimming over the text’s localized disruptions in the interest of a simpler, more general and linear understanding of “what happens” in the novel, is at once both a seemingly necessary reading strategy and an interpretive evasion that Warhol anticipates and impedes. By rendering *a* incomplete and irresolute through the retention of error, he forces the reader to oscillate between reading the novel superficially and reading it completely, character by painstaking

character; each method offers its own forms of clarity and comprehension as well as its own interpretive blind spots.

Through a number of interjections by the women who typed it, *a* documents this standardization of error across the breadth of the office's typewriter-system as well as within the scope of the single body-machine interface. These interjections are *a*'s clearest and most immediately readable traces of transcriptive undecidability, raising the problem of the complex and distributed task of transcription within the modern office environment that Warhol mimics by hiring the typists. The presence of the typists in the production of the novel only becomes visible at these moments of aporia, precisely the sorts of problems that it is traditionally the typist's job to avoid in favor of determinacy, clarity, transparency, and faithfulness to original material. These moments thus mark tension at the procedural, authorial level as well as at the textual level, with the bodies, machines, and protocols of the office ceasing to deliver their traditionally intended results. What appears within the text in the place of these results is a blunt registration of the unattainability of clear and faithful transcription. Although the typists mark problems in transcription through these interjections, and at certain points also provide glosses on those problems, they rarely rectify them or make the text transparently readable, nor do they accept responsibility for problems or assign responsibility for resolving them. Indeed, to take such redemptive and restorative actions would be wholly contrary to the project of the novel. In marking transcription problems in a blank fashion, the typists' interjections both set in relief the office's larger network of textual production and present problems of transcription as inevitable and irreducible within that network. The text that results suggests that the unstable operation of transcription that the novel

undertakes is the norm rather than the aberration, and that transcription itself is paradoxically neither a broken operation nor a fixable one, but rather a mode of writing that necessarily must contain disruption within and precisely because of its standardizing structures and directives.

Several different forms of transcriptive instability appear over the course of the novel. Many of these are meaningful or allusive in a way that suggests a clear, deliberate intervention into the novel's aesthetics and thematics by one or more of the typists. In these moments, a typist often raises the aesthetic problem of transcription through a sort of cross-media pun, a slippage in meaning that points toward the problems of moving information from tape-recorded sound to typewritten text. For example, a conversation between Ondine and the character Rink Crawl centers on the homonymy between Callas³¹ and the skin condition known as a callus:

O— . . . Oh ooh, my callas. Oh ho.
 R—Your calls. He's worried about his callas; it can't even sing.
 O—My callas is hurting me. (265)

Dworkin writes of this exchange that “[t]he pun that might otherwise be taken for a transcription error is corroborated by Ondine, who exclaims: “Your calls. . . .” (“Whereof” 54).³² Yet I would suggest that the process taking place here is more complex and distributed than Dworkin's either/or dichotomy between pun and transcription, between deliberate linguistic confusion and accidental mechanical confusion, can account for. After all, the typist transcribing the scene is in on the joke as much as the two men

³¹ As my allusions to Callas here and elsewhere suggest, she is a frequent reference point for the novel's characters: her always mediated presence within this always mediated text seems to serve as the ideal for a sort of feminine diva identity that is central to the self-fashioning of Ondine and other Factory members.

³² Dworkin attributes lines in this passage that are seemingly marked “O” for Ondine to Warhol, and lines seemingly marked “R” for Rink to Ondine. This transposed attribution, whether deliberate or not, echoes the novel's own internal problems of transcription and attribution.

speaking, if not more so: by transcribing (almost) all of the instances of the word in question—those that refer to the “sing[ing]” opera diva as well as those that refer to the “hurting” skin condition—as “callas,” she produces a transcript that is neither an accurate, transparent record of verbal punning nor an incorrect, error-ridden record of straight-faced, humor-free speech, but instead locates the complexity and confusion of the joke at least partly in the act of transcription itself. To type “callus” at any point here would be to imagine the joke as transparent and easily moveable across the different media in play—and thus not as a joke at all. Instead, the typist arbitrarily compacts the two spellings into one, using the resonance between them to mark the ambiguity and limitations of transcribing this or any spoken material (a set of conditions that is extended and made more directly visible in the typing of “calls” for “callas”). Through this deliberate compaction, the transcription of the novel becomes visible as a stage in the production process in which information is at turns lost, transformed, distorted, and set into question, rather than merely transmitted.

In other moments, the novel’s characters themselves articulate this difficulty more explicitly, acknowledging the position of the typists and adding further layers to the problem of transcription, as in this unattributed exchange:

[I]f you’re all woman there’s no need to be a transvestite.
 Uheauh.
 How are we going to write “Oouh”?
 It’s hard but we’ll find a way.
 Uheauh. We have to get, there’s . . . my throat. (32)

This passage imagines the act of transcription as at once broken and reconnected across two distinct temporalities of information production. In switching back and forth between “uheauh” and “oouh” in the moment of typing, the typist performs the instability of typed

transcription within the structures of office. Yet this instability is of course already embedded in the taped source material by the speaking characters, who knowingly discuss the difficulties of putting such a nonverbal expression into text. As they do so, they explicitly include themselves in the writing process: the question they raise is not “how are the typists going to type ‘Oouh’” but rather “how are we going to write ‘Oouh’?” This inclusion suggests an aesthetics of transcriptive writing that begins before playback of the tape and typing of the text, at the moment of the initial speech-act itself. Such an aesthetics both accommodates the textual aporia visible here and elsewhere in the novel and imagines that aporia as the product of a distributed process of textual production incorporating multiple human and technological agents, a process that is always collaborative, but never complete. Indeed, the novel’s moments of tension between sonic and typewritten information suggest that transcribed text—and by extension perhaps any mediated text—never sits stably within one field of information, even when it has seemingly reached its “final” site of storage. It flickers between different fields in microscopic increments, bearing the marks of the multiple conflicting and complementary agents that shape it.

Other moments of interjection take the form of a narrative or description of sonic dimensions of the tape that are ultimately impossible to reproduce. Some of these moments register the difficulty of transcribing multiple sounds and voices at once, mentioning “*a fiery, simultaneous, and therefore totally garbled conversation*” (381) or “*remarks*” that are “*uttered simultaneously and are largely indistinguishable*” (391). While these comments speak to a limitation of the body in its inability to separate and comprehend multiple streams of sound, other moments speak to a breakdown in tape

technology that the typewriter cannot correct for or reproduce, such as a moment where the “*Tape speeds up to Munchkin chatter*” (391) for an unspecified duration, or the following exchange between Ondine and the Sugar Plum Fairy:

SPF—Who was that person who came to my house with chains wrapped around his . . .

Tape goes out of control.

O—(*continues, several sentences after malfunction*) What was it? (388)

In these moments the nonlinguistic dimensions of transcription appear through some of the novel’s plainest uses of language: the terseness of the typist’s annotation operates as a sort of aesthetic understatement, amplifying the imaginative effect of the distortion of the tape errors through the succinctness with which they are described. It is as if no words could successfully capture the Munchkin quality of the characters’ speech or the “out of control” “malfunction” of a major tape error, and yet at the same time it is as if the typists simply chose not to render these effects in any greater depth, as if in marking them so briefly they saw a more comprehensive rendition not as impossible but merely as too much of an inconvenience or challenge within the workaday flow of transcription. Indeed, rather than signifying an unusual or subversive action on the part of the novel’s typists in particular, these moments seem in keeping with the efficiency and expediency demanded by typewritten transcription as a form of work rather than as a conscious aesthetic practice—they force us to remember the regimented labor required to transcribe the chaos of this or any sonic document into printed text, as well as the incompleteness and contingency that result from such regimentation.

The typists’ most substantive interjections within the novel often appear as direct annotations, qualifications, or questions about the immediate material they are working with. In these moments, the typists break both the flow of transcribed sound and speech

on the page and the flow of transcription itself. Their textual insertions register information that is wholly outside of the material of the tapes, thus making explicit the uneven, additive condition of multi-agented transcription within the office. Left unresolved in the final published version of the text, these moments suggest that the fundamental problem of transcription is not one of eliminating ambiguity but rather one of addressing and contextualizing that ambiguity as irreducible. At times the issue raised by a typist's question is one of simple sonic accuracy: "I thought you had the pill out (pillow?) She looks just like—Disconnected lines? (*or* Did you connect the lines?)" (173). Interspersed with Ondine's speech, the typist's questions here pose possible alternate conceptions of the sonic record at stake, material divergences that lie both within and outside the "main narrative" of the transcript. In many cases, these questions become a means of complex, explicit self-fashioning and self-reflexivity within the text, as when one of the typists annotates her own transcription of Ondine singing along with a Callas record: "[Y]'know and it's just when you get 'Throngera (*singing along in Italian—check the record or Ondine*) aschulta' where there's no pause—'familia, sculta' (*singing again*) she can't take, you can't take a rest there where there's no rest, what is she singing? Who wrote it?" (58). The typist's troubling of content and authorship through her brief note to "*check the record or Ondine*" both parallels Ondine's own far more logorrheic expression of confusion and explicitly raises the unanswerable question of the novel's larger network of production. Is the "record" the typist refers to the specific Callas LP being played or the more general recorded material of the tapes? To whom is this note addressed, and what sorts of informational relays does it invoke through that address? Is the typist writing to herself for later reference? Or is it a note from one typist

to another who was supposed to review and revise the transcript, but never did? Or is it a note to Warhol, or to Factory foreman Billy Name, who was responsible for marshalling the galleys through publication, or to the reader? Although the communication could have been intended for any of these recipients, the novel's deliberately uncorrected condition leaves these questions unanswered, thus leaving any number of potential transcriptive relations open, each with its own dynamics of power, authorship, and technological investment.

Just as each individual interjection negates the possibility of a clear transcription or reading of the novel at the same time that it annotates and adds to it, it is equally impossible to generalize an authorial role for the typists from the novel's multiple different kinds of interjections. Through these impossibilities, Warhol offers an aesthetic tracing of the distributed structures of subjectivity and authorship within the office. It would be tempting to claim either that the moments of interjection in *a* are the marks of a sort of successful authorial coup, through which the typists repeatedly announce themselves as having the most clear, stable, and autonomous voice(s) in the novel, or that they serve as rare exceptions to a pattern of the discipline and silencing of female voices in the novel's world. However, given the dramatically dispersed authorship of the novel, and especially Warhol's peculiar presence within and around the text as a figure who is both domineering and liminal, neither of these perspectives can fully account for the role of the typists' voices in the novel. Ondine expresses increasing frustration with Warhol's insistence on continuing taping as the novel progresses, and at one point refers to him as "a slave driver . . . Simon La Warhol" (65). Warhol does pressure Ondine at times, and in

a later reflection on the novel, he expresses dissatisfaction with the skills of the typists, complaining that

some kids came by the studio and asked if they could do some work, so I asked them to transcribe and type my novel, and it took them a year and a half to type up one day! That seems incredible to me now because I know that if they'd been any good they could have finished it in a week. I would glance over at them sometimes with admiration because they had me convinced that typing was one of the slowest, most painstaking jobs in the world. Now I realize that what I had were leftover typists, but I didn't know it then. Maybe they just liked being around all the people who hung around at the studio. (*Philosophy* 95)³³

Warhol seems to speak here as a traditional office manager, dissatisfied with the typists' work ethic and with what he sees as their phony, overwrought commitment to accuracy; his description of the typists as "leftover typists" suggests that the novel, with its constant uncorrected errors, interjections, and disruptions, can similarly never be anything greater or more central than a weak, peripheral byproduct of technocapital textual production. Yet his position within the novel and the penchant for ephemerality, excess, and waste that runs throughout his work belie these representations of him as intolerant and exacting. His presence in and around the novel is so oblique, so deeply rerouted through his constant location behind the tape recorder, that his authorial role can hardly be taken

³³ The status of the leftover is a crucial and complex issue in Warhol's work, and elsewhere in the *Philosophy* he reflects in particular on the embodied female leftover within the labor of cultural production: "When I see an old Esther Williams movie and a hundred girls are jumping off their swings, I think of what the auditions must have been like and about all the takes where maybe one girl didn't have the nerve to jump when she was supposed to, and I think about her left over on the swing. So that take of the scene was a leftover on the editing-room floor—an out-take—and the girl was probably a leftover at that point—she was probably fired—so the whole scene is much funnier than the real scene where everything went right, and the girl who didn't jump is the star of the out-take" (93). In their resistance to transcription as a perfectly synchronized "jump" between media, the typists of *a* might be considered its leftovers, if not necessarily its (only) stars.

at face value as either a force that discursively controls the typists or a force against which they discursively rebel. He serves more as a floating overseer in both its narrative and its production, at once both in (almost) total control of the novel and (almost) totally outside and absent from it. Indeed, his retention of the typographic problems produced by these four leftover workers emphatically shapes the aesthetics of the novel in their image, as a massively leftover novel written at the disjunctures among the multiple human and technological subjects involved in its production. While the text presents a polyphonic aesthetic at the level of production as well as at the level of content, it is not an aesthetic that is predominantly characterized at either level by contestation per se among its numerous voices. On the contrary, the typists' moments of entry into the novel foreground a mode of subjectivity and intentionality that shapes the text in crucial ways without being teleological or exegetical with regard to its content or authorship. These moments, devoid as they are of any attribution or directly significant commentary, announce an aesthetics of transcription primarily concerned with the limitations of transcription, with the impossibility of separating moments of interchange between the different parties along the path of transcription from moments of breakdown between them. Indeed, these untouched textual breaks suggest that typewritten transcription, far from being the product of a seamless, linear movement from one mode of storage to another, emerges from a dense, overlapping, and uneven network of actors that includes humans and machines, speakers as well as (largely) silent parties.

Moreover, within such a schema, Warhol's presentation of four female typists as crucial elements in this network becomes visible as a deliberate, calculated rhetorical

gesture. Gender and sexuality are key forces in much of Warhol's work, and as a female group, the typists serve not only as transcribing agents in the production of the final text, but also as signifying agents within a performative critique of the dynamics of gender and technological capital.³⁵ By hiring this group to transcribe this novel, Warhol effectively sets in motion a limit-performance of the mechanics of the typing pool, a collection of anonymous women assigned to transcribe a massive omnibus text, saturated with information yet largely devoid of any extrinsic meaning. The bodies of the four typists are loosely and flexibly connected to one another, to the devices around them, and to the body of Warhol himself as the ostensible author of *a*; they are the unstable crux of Warhol's argument about the bodily and authorial problems of transcription in the era of taping and typing.

How, then, does the novel, produced in such large part by the unseen and uncredited labor of these female bodies, imagine the bodily dynamics of the work of transcriptive textual production? How does Warhol seek to imagine and transform the body within the space of the typing pool? These actions take place at the most microscopic textual level: as elsewhere in *a*, the marks made by the typewriter encode a history of bodily movement and (re)configuration that can never be fully retrieved. The individual characters produced by these machines serve as points of condensation and compaction for that history, coding the bodies that produce the novel as indeterminate and aleatory in nature precisely because of their involvement in textual production. In order to imagine this compaction, I want to return briefly to one of the exchanges from the novel that I quoted earlier:

³⁵ See Koestenbaum and Doyle, Flatley, and Muñoz for useful discussions of the place of Warhol's sexuality within his life and work.

[I]f you're all woman there's no need to be a transvestite.

Uheauh.

How are we going to write "Oouh"?

It's hard but we'll find a way.

Uheauh. We have to get, there's . . . my throat. (32)

By switching back and forth between "oouh" and "uheauh" spellings, the typists not only perform the impossibility of complete transcription, as I suggested earlier, but also provide a textual parallel to the paradoxical condition of a man being "all woman." The association of "all woman" with these nonverbal communications identifies it as inexpressible through "normal" verbal speech and constantly in flux; in the context of the Factory's queer divas, it seems a sort of androgyny at the extreme, a level of performative refashioning so deep that it vastly outstrips the performative refashioning of "mere" transvestitism. The concept of being "all woman" appears frequently in the conversations of the novel's male characters, most often in an abbreviated form as "A.W.:" one character is described as "dEFinitely A.W." (375), while another is "A.W., not asexual" (61).³⁶ In its purely alphabetic nature, A.W. represents the fluid sexualities and bodies of the novel's characters and producers constituted as typewritten text. It invokes women, men (who are always also women), and last but not least the particular and particularly ambiguous body that circulates through the text largely in silence: A.W., of course, stands for Andy Warhol.

If we take A.W. at its face value as a typographic mark made for the body as well as by the body, it becomes effectively impossible to know with any clarity or stability exactly which embodied characters or kinds of characters these typewritten characters stand for in any one given instance. A.W. is a textual means of foregrounding,

³⁶ Given the novel's title as well as the more general relations between typewritten text and embodied sexual identity that I attempt to outline here, much might be said about what it means to be *asexual* in *a*.

transforming, and intermingling the bodies within and around the text—characters and authors, typists and typewriters, men and women, straight and queer—but also a means of concealing them. It is at once all, some, and none of these bodies. Scattered throughout the novel, this multilayered authorial signature invokes the all-woman group that types the words of the novel and the “all-woman” group that speaks those words. Each group uses the technologies at its disposal to make marks that both hide and reveal the other group, with A.W.—both the authorial mark itself and the ostensible author himself—as perhaps the most complex and compacted textual secretion of all. Yet as with any and all of the novel’s marks and bodies, A.W. and Andy Warhol offer only the microscopic endpoint of a massive history of bodies, machines, and information circulating through space, interpenetrating and recombining with one another in combinations that cannot be extracted from the mere characters on the page. Thus the indeterminacy of both A.W. and the text of the novel as a whole is a direct function of the complexly mediating network of bodies and machines that produces them; as a mark that registers the indeterminacy of that network, A.W. also in turn produces and reproduces it. A.W. is also similar to all the text of the novel in that it occupies space but refuses any singular location: we can never know how each mark traveled through the Factory’s transcription network, which hands produced each mark, which bodies each mark set in motion, or which bodies each mark brought into contact with one another.

To understand *a* as a deliberate leftover—as the encyclopedic, overwhelming typewritten surplus of a “finished” novel that itself does not and cannot ever exist as finished—is to propose that the bodily, procedural, and textual protocols of the typewriter have the potential to bring about a writing system with a set of conditions different from

those posed by the technocultural binarism of the literary genius and the secretarial technician with which I began this chapter. The content of *a* is simultaneously initial, transitional, final, and residual; its systemic textual confusions present a vision of the transcriptive writing of postwar technoculture as a mass of potential and actual leftovers, moments of varying degrees of imperfection and imprecision that resist elimination from the act of typing. The potentiality for error that Warhol's novel exploits exists within all typewriting, even and especially if it is often eradicated in editorial correction and revision. Indeed, attending to the microscopic material specificities of the typewriter reminds us of the ways in which modern technological writing is often a highly embodied and multiauthorial practice even in the initial stages of production, regardless of the immaculate façade of any seemingly finished product. In foregrounding standardized error as the central characteristic of typewriting's materiality in this chapter, I have attempted to offer a theory of this embodied, multiauthorial condition as capable of existing across, and thus of complicating, simple boundaries between collaboration and contestation, intentionality and contingency, the biological and the technological, the literary and the corporate, and perhaps most importantly, between writing as a material product and as an immanent process.

Of course, few texts traverse all of these lines in the way that *a* does, while many purport to transcend them in their seemingly finished states. Indeed, just such a transcendence is one of the central objectives of the mainstream publishing industry. Yet the typewriter sits at the oblique intersection of all of these lines, a modern technology with the capacity to shape the aesthetic and subjective dimensions of writing without necessarily imposing a fixed teleology upon them. While a wide spectrum of conceptions

of modern writing have claimed the typewriter as a constitutive force, the new modes of meaning production it made possible are ultimately not wholly synonymous with either the individuated profundity of the mythic Great-Man author, the mechanized, anonymous eradication of subjectivity that Kittler envisions, or the emancipatory politics of technological change that Benjamin calls for. On the contrary, the typewriter provided access to an inscriptive world with a different system of valuation (or lack thereof) at both the micro- and macroscopic levels. Within this system, the materiality of text manifests itself in the overwhelming probability of localized, idiosyncratic disruptions rather than in any larger predetermined horizon of aesthetic, subjective, or political possibility. As widespread as these disruptions are in the immanent practice of typing itself, they are almost nowhere to be found in most finished texts; indeed, these disruptions in many ways constitute the condition of possibility for the finished status that supersedes and erases them. Yet the ephemerality that characterizes error in many instances of typing is also characteristic of the typewriter itself. Understood in this fashion, the typewriter occupies a complex, contingent place within the history of postwar writing machines, as well as conversely revealing the contingency of that larger history; in making possible the microscopic errors and discontinuities of writing, it makes visible the macroscopic instabilities and nonlinearities of media history. Complex, irresolvable, and caught in tension with its own assimilation into the invisible, the typewriter reveals media history to be a history of friction and inconsistency rather than of standardized structures of transition.

Coda: Exquisite Bodies, or, How to Compute without Computers: The Network Poetics of the Typing Explosion

I began this chapter with a critique of the conception of media and literary history underwritten by the centrality of the computer within the critical conversation regarding postwar writing technology. As a counterforce for the critical centrality of the computer, I have attempted to trace a historically and materially grounded aesthetics of the typewriter as a vehicle of textual contingency and randomness, telescoping in and out from the ambivalent space of the single typed character to the massive archive of postwar office typing, and from the microscopic bodily errors that produce the typographic instabilities of Warhol's *a* to the macroscopic epic novel that relies on those errors for its aesthetic and ideological power. While the critical centrality of the computer is, as I suggested at the outset of my discussion, the result of historical nearsightedness, it is also an intellectual trend that stems from the cultural centrality of the computer in the present moment. This contemporary centrality often has the effect of painting the obsolescence of the typewriter in bold, definitive strokes. In terms of the raw usage of different writing technologies, there is indeed some validity to this perspective. As much as the Selectric revolutionized typing, it was also the "last typewriter" in many ways: while it quickly came to dominate the market, accounting for approximately seventy-five percent of all electric typewriter sales in the United States by 1975, its sales began to drop just as quickly as part of a general decline in typewriter sales in the late 1970s as word processors and desktop computers became increasingly popular (Gantz 145).

Yet just as the idiosyncrasies of the typewriter pose the possibility of a disruption within the sweep of media history, they also point towards more local complexities and

instabilities within the production of text in our own computer-dominated historical moment. As a means of tracing a technocultural line between those two moments, and thus of playing out some of my claims about the aesthetics of typewriting in the present, I want to conclude with a discussion of the work of the contemporary performance group known as the Typing Explosion Union Local 898. The Typing Explosion, as they are more generally known, consists of three women in their late 20s and early 30s who perform both in established performance and theatrical venues and in what they describe as “guerilla poetry construction on the sidewalk or in an office” (“Press Kit” 2). The group first performed in 1998, disbanded in 2004, and briefly reconvened in 2006 (“Calendar”). In their performances, the three women enter the performance space dressed in vintage 1960s secretarial clothing and take their seats at a long table behind three manual typewriters. Audience members approach the table and have the chance either to select poem titles on index cards stored in a card catalog or to write titles of their own choosing on a blank card. The first typist in line then takes the card and begins typing a poem for that title. The three typists then work collectively on the poem, passing it back and forth and communicating with one another through a secret code of bells, horns and whistles. They work on up to three poems at any one time, circulating them back and forth, before handing completed, certified copies to the audience members who originally submitted them, for the price of one dollar.

This performative restaging of the postwar typing pool relies on a highly complex and overdetermined relationship to cultural and technological history. With their self-conscious yet straight-faced retro aesthetic and their collective, deliberate anonymity—they operate under the shared alter-ego of “Diane,” as if taking on a single hyper-generic

persona of the postwar working woman (*Explosion*)—these three performers look at first glance almost like the noncharacters of Cindy Sherman’s *Untitled Film Stills* come to life, unlocatable types adrift in the pastiche of postmodern culture. Yet what is most strikingly relevant about this aesthetic is not its detached referencing of the past, whether as nostalgia or as a critique of nostalgia. Indeed, their aesthetic critically marks a constant cultural cycle of idealized technological memory, in which the nostalgia that Kittler expresses for handwriting gives way to nostalgia for the typewriter. The group’s appearance also registers the extent to which the secretarial is newly (re)current on a wide scale; as the healthy market for vintage secretarial clothing on eBay might suggest, these three artists resemble hipster working women in New York, San Francisco, or any other major cultural center as much as they resemble the lost archetypes of 1950s working femininity, if not moreso. Indeed, as much as they perform the aesthetic of the corporate mid-century—indeed, precisely because they perform this aesthetic alongside so many other similar young women—they register as textual and cultural laborers within the technology and aesthetics of the present moment; beyond their underlying recreation of the past, their work constitutes an intervention into the dynamics of the retro rather than a deployment of those dynamics as such. Instead of engaging in an exercise in nostalgia of any sort, the Typing Explosion return to the “lost art” of typewriting, as it were, in order to lay its operations against the operations of contemporary digital culture, and in doing so to probe the ways in which writing subjects within that digital culture might still be typing.

While the group’s intent is precisely not to reify the typewriter as it is traditionally understood, their project of thinking across different epistemes in media history

nonetheless entails a certain amount of political and historical negotiation: they announce their practice as a departure from what might be understood, from one ideological stance, as the alienation of the subject produced by late capital's dispersion of the body through the computer. As one member puts it in a documentary on the group, the audience is "face to face with us and with the creation of art and I think that that's something that isn't the same as if we were typing on computers and it was coming up in other people's cubicles across the city. So what makes the Typing Explosion engaging . . . is that we're face to face with people" (*Explosion*). Yet their performance subverts the professed transparency and immediacy of this predigital communication space in a number of ways. While the performers and the audience are indeed "face to face," they interact without speech or verbal expression other than the words they produce on the page. Moreover, the typists' "secret language" of "bells, horns, and whistles" ("Press Kit") seems intended as much to confuse and constrain the audience as to provide the artists with a means of internal communication, if not more so. This system makes a dramatic claim on the gendered embodiment of typewriting: although the female body is linked to the machine here, the silence and anonymity of the typing pool under this connection is a force of aesthetic collectivity rather than of workplace subordination or subjective foreclosure as Kittler sees it, a revision that relocates communication and aesthetic production from one-on-one spoken conversation to the circulating itinerary of the typewriting body and the typewritten page. The performances of the group validate those two connected spaces as productive avenues for discourse within the larger mediated space of late capital, independent of (and indeed prior to) any larger context.

Thus the work of the Typing Explosion finds its aesthetic center in the bodily production and circulation of texts and documents, in the immanent act of typing rather than in the content of any given typed document as such. Indeed, the crucial element of this work is the scene of typing rather than the poems themselves: the members of the group describe their work in mechanical terms, as “preparing a document for the person that was in attendance,” and they note the importance of excluding the words “poetry” or “poem” from the title of the group (*Explosion*), to say nothing of the choice of “typing,” with its technological implications, over the more generalized term “writing.” The artists replace writing, as well as any sense of typing as attached to authorially individuated writing, with a system that performatively pushes through the form of the typing pool to enter into dialogue with the systems of the computer and the internet. They sit in a line and describe their work as “poetry on demand” as if part of an assembly line, and their work echoes the Surrealist poetry-passing game known as “exquisite corpse.” Yet their work differs crucially from both of these models in that the poems of the Typing Explosion move non-linearly and recursively, circulating repeatedly through the hands and machines of the three performers without any predetermined path. The randomness of this process is neither a rebellion against Fordist technological labor practices nor an attempt at random poetic collaboration in any straightforward sense, but rather both a subversion of the aesthetics and labor protocols of technologically determined, office-based writing and a natural extension of them.

In this sense, the Typing Explosion harnesses “the chaos of the writing pool” (*Explosion*) of postwar corporate culture in a manner that pushes that chaos to its logical extreme. This gesture is similar to Warhol’s work in *a*, yet while Warhol positioned

transcription as a limit form of writing, foregrounding the opacity and error that inevitably emerge as information moves through different bodies and different media, the Typing Explosion works in the opposite direction, pushing writing to the verge of transcription. One member of the group describes their performances as a “bold representation of [their] true sel[ves],” but also notes that they do not have “time to really read what the other person has written, but as you’re threading it into your machine your eyes will just sort of gaze as you go down the page, so you’ll sort of pick up these buzzwords, or you’ll glance at the title and you’ll get a general feel about the poem” (*Explosion*). Taken together, these contrasting descriptions understand the artists’ bodily and even mental contact with the textual material at hand as at once both deeply invested with importance and also ephemeral and tangential, as the byproduct of routing information rather than as a context for direct “writerly” attention in any conventional sense.

Moreover, the group’s practice uses typewriting as a means for modeling and tracing an approach to writing and information management that also invokes the paradigms of digital culture. Within both systems, information is both a source of identification and attachment and a quantity that is easily moveable, revisable, and exchangeable, shaped and constituted by its circulation through multiple different spaces, machines, writers, and readers. As one of the members says of the group’s writing, information constituted in this way conveys an “urgent human voice” rather than “an individual voice” (*Explosion*). This comparison implies a writing practice that is more urgent and more human precisely because it is not individuated in the manner of the traditional isolated literary author at his or her typewriter. Indeed, the use of the term

voice here seems almost inaccurate, given that expression here emerges as much from performative procedure as from any expressive poetics on the page, if not considerably more so. In performing this conception of technological writing, the Typing Explosion dismantles the nostalgic oversimplification of the typewriter as a machine that produces clinical, stable writing from a monadic position. Moreover, in doing so they present instead a vision of the typewriter within contemporary culture as a supplement and a predecessor to the computer, capable of producing connectivity and contingency through its similarities with the computer as well as through its differences.

Indeed, the group's visible passing back and forth of poems echoes the operations of the computer in that it brings into relief the often-invisible flow of information through contemporary information networks. This circulation of poems among the performers is not only inherently non-linear, as I have discussed above; it is also inherently embedded in bodily attachment to the typewriter in a way that suggests a dramatically different set of concerns than that of other strategies for collaborative writing. By constituting their practice as a mobilization of information around and through the typewriter, the Typing Explosion makes the question of technological mediation and circulation central to their art. Because any aesthetic mobilization of the typewriter in an age of computer dominance necessarily begs the question of the computer and its relation to the typewriter, the way in which the group uses a network of multiple typewriters collapses the perceived distance and difference between typewriter- and computer-based writing as historical moments and modes of textual production. The typewriter becomes more clearly visible as the antecedent to the computer not (only) in terms of the mechanical production of text per se, but in terms of the ways in which both machines rearrange the

micro- and macroscopic spaces around that production of text. Thus the image of three textually connected typewriters takes on the appearance of a prototypical computer network, while the deliberate secrecy and inscrutability of the group's system of bells, whistles, and passes both recuperates the unpredictable textual mechanics of the typewriter and the typing pool within the present moment and also posits this mechanics as the technological ghost underlying the seeming exactitude and seamlessness of every digital transmission.

Indeed, this rearrangement of space attains its greatest dispersion in the group's distribution of their work to the audience. The group's poetic material begins in the form of titles chosen from the closed archive of the group's card catalog, moves from the audience member's hand to one performer's hand, becomes a poem through its circulation through the hands and machines of the all of the performers, and finally returns to the hands of the audience member, who may share it with others in the audience, take it home, or otherwise store or disseminate it as he or she sees fit. Taken as an ongoing practice over many performances, this distribution amounts to the mediation of material from one consolidated archive to produce another radically distributed archive, with the end result being a network of singular and unique texts that takes on a random shape through the effectively random dissemination of poems. The fact that the Typing Explosion retains a carbon copy of each poem it produces provides a sort of vestigial archive that retains the content of their radically dispersed poetic network in a contained form that echoes the initial source archive of the card catalog. Both individually and collectively, these copies function as a tidy end result that both covers over and reveals the vast material and bodily disarray of technological writing that begins

with the typewriter but hardly ends with it; the poetic network that these contained copies stand in for dramatically exaggerates the circulatory dynamics and bodily engagements of the typing pool to an extreme that gestures at the digital network of the world wide web.

To stage such a connective dialogue as the group does, laying the typewriter against the computer, with the typing body as the means of connection, is to suggest that those ghosts of technological instability are never fully banished. If the typewriter persists within such a connection, it does so most deeply not in the deceiving speculations of cultural nostalgia, but rather in the ways in which the embodied experience of typing culture persists in running underneath the embodied experience of contemporary digital culture. As much as the members of the Typing Explosion attempt to perform historical distance and difference around the object of the typewriter, they also perform a strange kind of historical compaction, constructing an operative schema that posits their technological practices of meaning production as strikingly similar to our own.

The differences between typewritten and computerized communication are of course myriad and present at every level. Yet the networked operations of the Typing Explosion and the parallels that their working practices draw between office typing and computer networking provide valuable correctives to a number of controlling narratives regarding the status of the typewriter, both the Kittlerian narrative of the machine as a mechanism of disembodiment and the popular cultural narrative of the machine as irretrievably lost to history. Their performances imagine a dead technology as momentarily, contingently alive, and in doing so, they imagine writing technology on the whole not as an inexorable historical march from one system to the next, but rather as a

field constantly overlapping itself, characterized by recursion, residues, and the unpredictable reappearance of the writing body across time.

**Text Turns the Image Over:
Cinematic Materiality and Reproductive Writing in Don DeLillo's *Running Dog***

Discarded pages mark the physical dimensions of a writer's labor—you know, how many shots it took to get a certain paragraph right. Or the awesome accumulation, the gross tonnage of first draft pages.

—Don DeLillo, “Don DeLillo: The Art of Fiction
CXXXV”

Chapter One of this dissertation used the precipitous obsolescence of the typewriter as a point of critical entry into rethinking the aesthetic horizons that that technology posed as a collective writing system. As I suggested, the typewriter occupies a strange crux position within modern media history. It was at one historical moment perhaps the most widely used writing technology, the most invisible and seemingly “immediate” (albeit in a radically deceptive fashion), and the most imminently vulnerable to obsolescence. This complexly overdetermined position, sealed and underscored by the typewriter’s speedy disappearance from the technocultural landscape in being eclipsed by the personal computer, makes it relatively easy to see both the uncanniness of the machine and the ways in which literary practice might exploit that uncanniness towards a critical appropriation and deployment of technology in the way that Warhol does in *a*.

However, not every technocultural change is as pervasive or as wholesale as the disappearance of the typewriter. Indeed, just as the irregular marks left by the typewriter’s material idiosyncrasies suggest a vision of media history characterized by residues and remainders rather than by epistemic breaks or gradually remediated change, that same irregularity is true of individual technologies themselves. What, then, are the material and aesthetic stakes of this more fragmentary conception of intermedia

relations? How might print literature appropriate the operations of a media technology caught in a more uneven flux between dominance and residuality? What problems and possibilities does such a media-historical moment open up for literary practice?

In order to engage these questions, I turn in this chapter to the novelistic response to film in the late 1970s as exemplified by Don DeLillo's *Running Dog* (1978). Theorists and novelists have explored the relations between literature and film virtually since the rise of film as a mass medium around the turn of the twentieth century.³⁷ I focus on *Running Dog* here because it provides a crucial paradigm for the literary appropriation of cinematic technique and technology at a moment in history when the status of film itself was threatened from multiple media-historical directions. On one hand, the electronic video images emergent as "the most likely candidate for cultural hegemony" (Jameson 69) in the 1970s offered the possibility of a world in which the complex apparatus for recording and playing film was unnecessary, replacing it with a mobile, incidental practice of moving images made possible by new technology, "the art form par excellence of late capitalism" (Jameson 76). The aesthetic and epistemological break produced by the rise of video was simultaneously a technological break, in which the apparatus of video supplemented cinema's "analogy of movement" with what Chris Darke, quoting and discussing Raymond Bellour's writing on video, discusses as "'a new analogy, that of an image without any delay.'" As a simultaneously degraded and clinical presence within the well-mastered film image, the video-image has come to replace the

³⁷ In this chapter, I focus on the material parameters of literary engagement with film within a particular historical moment; thus the broader history of the field of relations between these two media is largely beyond the scope of my discussion here. For a seminal theoretical consideration of literature and film, see Bazin, "In Defense." For examples of literary engagements with film, see the "Wandering Rocks" episode of James Joyce's *Ulysses*, the "newsreel" sections of John Dos Passos' *U.S.A.* trilogy, and Thomas Pynchon's *Gravity's Rainbow*, particularly the closing section of the novel.

grain of 8mm and newsreel with its own zero-degree realism” (194). Indeed, this break was not only a break produced and sustained by technology but also one that brought technology as a subject of inquiry to the center of aesthetic production itself; as Fredric Jameson claims, “one would want to defend the proposition that the deepest ‘subject’ of all video art, and even of all postmodernism, is very precisely reproductive technology itself.” Jameson raises a critical aporia in situating reproductive technology as the central subject raised by video: “if all videotexts simply designate the process of production/reproduction, then presumably they all turn out to be ‘the same’ in a peculiarly unhelpful way” (95). While Jameson leaves this problem explicitly unanswered, I will suggest that *Running Dog* intervenes in precisely these questions of sameness and difference, and of production and reproduction, raised by cinema’s crisis in the face of video.

In addition to the challenge posed by the rise of video, film also faced an internal threat in the 1970s as a result of its own material composition. From 1899 to 1949, nitro-cellulose film, more commonly known as nitrate film, was the primary medium for motion picture storage. Nitrate film is commonly thought to provide the highest-quality image of any kind of stock, and was more durable and less expensive than any other format available during the early twentieth century. However, nitrate also decomposes over extended periods, and, moreover, is highly combustible, releasing a hazardous gas when it burns.³⁸ This dual condition posed a dual threat in relation to the cinematic archive of the twentieth century, rendering it both highly vulnerable in and of itself and

³⁸ Slide notes that nitrate’s chemical composition “is very similar to that of guncotton, used in the manufacture of explosives, resulting in its burning 20 times as fast as wood” (1). See Slide and Smither for historical overviews of the cinematic use of nitrate and of the various archival efforts to preserve films originally shot on nitrate.

highly dangerous to anyone who handled or stored it: although these dangers catalyzed (pun intended) the film community around the task of preservation from the 1960s onward, common belief holds that “75 percent of all American silent films are gone and 50 percent of all films made prior to 1950 are lost” (Slide 5), while numerous fires at film archives caused danger and damage to those who worked with nitrate film as well as to the film itself (Smither 421-490). The dangers inherent in nitrate film stock not only posed a material threat to the cinematic archive, but also threw into relief the highly material status of cinema as an art form; in raising an imminent endpoint for that materiality, nitrate made visible what André Habib describes as “the central ambiguity of cinema’s temporality: since its origins, it has combined the mythic time of eternal preservation with the ephemeral time of industrialized production” (125). Yet while this ephemerality certainly threatens individual films as cinematic objects, precisely the opposite is true on the global scale. In revealing the ephemeral industrial reality undergirding the mythic eternity of cinema, nitrate’s deterioration and combustion constitutes the necessary condition of possibility for any critical approach to cinema whatsoever: as Paolo Cherchi Usai notes, “[i]t is the destruction of moving images that makes film history possible[.] . . . If all moving images were available, the massive fact of their presence would impede any effort to establish criteria of relevance” (18-19). In this sense, the threats to cinema posed in the 1970s by the rise of video and by the increased urgency of archival preservation against further disintegration at once both made the urgency of film history visible and made that history itself possible. Hence DeLillo’s intervention at this fulcrum point: in centering the narrative of *Running Dog* on the search for a highly fragile lost film within a culture of video, he situates “the

destruction of moving images” as the condition of possibility for his own novelistic writing as a form of film history. If “[e]very film archive can be defined by its lacks, its losses, and the journeys the prints in its collection had to make” (Habib 121), DeLillo uses *Running Dog* to delineate a historically specific film archive defined by the media-historical double bind of electronic information and celluloid destruction; this double bind in turn becomes a point of departure for testing the mediating and media-historical capabilities of novelistic form.

Although *Running Dog* does contain moments that critically engage video culture—for example, the description of a corrupt United States Senator as “all image . . . a bunch of little electronic dots” (31), or the recurrent theme of surveillance, which I touch on below—DeLillo’s larger engagement with media change within the novel is not strictly an intervention on behalf of or against either film or video *per se*, but rather a self-reflexive intervention within the parameters of the novel itself through a reconsideration of form. *Running Dog* includes several textual representations of cinematic material at crucial junctures in the novel (and indeed, as I suggest below, the narrative of the novel as a whole is determined by this material). While this literary technique has its precedents, DeLillo deploys it within the context of the particular material, technological, and political questions circulating within the media culture the novel depicts and responds to. In doing so, he imagines a formal practice by which the print novel might register and intervene within the cultural landscape surfacing around the relations between film and video in the late 1970s in order to stage an imaginative claim on intermedia relation more broadly.

Mediagraphic Metafiction and the Afterlife of Cinema

Running Dog begins and ends with a film to end all films. The novel centers on the search for the camera original of a film shot in the Berlin bunker of Adolf Hitler's Reich Chancellery just before the fall of the Nazi party in 1945. Beginning with the cryptic intimation that "[a] film exists" (18), in the words of Lightborne, a dealer and collector of erotic art, the novel spin outs a number of narrative strands and conspiracies circulating around this mythical aesthetic object, detailing the efforts of various corporate, governmental, and paramilitary interests to locate, acquire, and distribute it. DeLillo ultimately reveals this film to be something entirely other than what it was initially rumored to be. At the outset of the novel, rumor has it that the bunker film is the sole record of an orgy that took place among the occupants of the bunker in the last days of the Reich, a moving image that would be "[t]he century's ultimate piece of decadence" (20). Yet at the end of the novel, DeLillo plays back within the text a film that is effectively the negative image of what has been promised to his characters and readers, a disturbing and disappointing comedic inversion of its deadly serious pornography: the film turns out to be a home movie shot by Eva Braun in which Hitler performs an impersonation of Charlie Chaplin for the elite of the Third Reich assembled in the bunker.

At first glance, then, *Running Dog* seems to use these two bookending images—Hitler as the libertine and Hitler as the Tramp—to anchor a narrative that is designed to disappoint its readers, building up expectations for the revelation of a pornographic film and then dramatically subverting those expectations in a manner that implicates readers as complicit within the culture of reproduction, simulation, surveillance, and image

consumption that the novel examines. This gesture of implication is central to the novel, as suggested in a conversation between Lightborne and Moll Robbins, a journalist researching the film for a “series of articles on sex as big business” (14):

“Go into a bank, you’re filmed,” [Lightborne] said. “Go into a department store, you’re filmed. Increasingly we see this.” . . .

“The camera’s everywhere.” (149-150)

Much of the critical work on *Running Dog* has focused on this gesture as indicative of a critique of media spectacle and media saturation by DeLillo. Mark Osteen’s reading of the novel exemplifies this perspective: “[w]e readers of *Running Dog*, engaged as we are in observing the observers [of the film], are thus also implicated in its exploitative ideology” (106).³⁹

In this chapter, I will consider DeLillo’s preparatory materials for the novel alongside several crucial passages in the final published text in order to extend and complicate the largely thematic and ideological approach to the novel’s media practices characterized by Osteen’s reading. Given the densely mediated culture that the novel represents and intervenes within—as well as, moreover, the novel’s own densely mediated surface—to offer such a thematic interpretation as a point of conclusion would seem merely to restate and reconstitute any number of postmodern truisms about the political stakes of our immersion within the moving image. More specifically, positioning this simple critique of simulation and exploitation as the novel’s central project falls short of fully understanding the way in which it imaginatively stages the relations and differences among different technological spheres and layers, and fails to attend to the

³⁹ For other discussions of the anticomantic revelation of the bunker film’s actual content in terms of this dynamic, see Cantor and Johnston.

specificities and materialities of these mediations and the ways in which DeLillo's language sets them in motion. Indeed, it is precisely through these negotiations that DeLillo presents us with something other than the standard narrative of contemporary culture and its mediations that a more literal reading of the novel would suggest is in play. As such, the reading of the novel I will pursue here takes the problem of simulation raised by several critics of the novel not as an endgame, but rather as a point of departure. I will suggest that, beyond ideological implication of the reader in the generalized problem of media culture, DeLillo offers a specific textual performance of cinematic materiality and mediation. In the most formally inventive moments of the novel, he uses text not just as a means of opposition against the omnipresence of "the camera" (and thus against media culture at large) but also as a technology by which to appropriate the camera's operations, refashioning cinematic material on the printed page in order to respond to it critically and flexibly. Through these specific engagements with the content and material conditions of the imaginary film shot in Hitler's bunker, DeLillo moves beyond a simple critique of simulation towards a formal model for a more complex and synthetic literary approach to media history and media technology.

DeLillo situates the bunker film as an object of extreme singularity within a culture of reproduction and simulation, variously describing it as the "[o]ne copy. The camera original" (18) and "the master" (98). With this singularity at the forefront of the novel's concerns, the material condition of the bunker film becomes a crucial question. Upon finally acquiring the film late in the novel, Lightborne comments,

I have the movie [but] I haven't even opened the can. . . . I'm waiting for technical help. . . . I'm afraid the whole thing will crumble if I open the can the wrong way.

It's been in there over thirty years. There's probably a right way and a wrong way to open film cans when the film's been in there so long. There might be a preferred humidity. Safeguards. Recommended procedures. (150)

The issues of material fragility and contingency that Lightborne gives voice to in this passage serve as a narrative catalyst for the novel, intensifying the stakes of the search for this textual object. Yet DeLillo also uses this conceit to address the materiality of celluloid film, an increasingly vexed issue against the background of the emergence of the electronic image in the late 1970s. DeLillo's preparatory materials for the novel show a preoccupation with the stakes of cinematic preservation and deterioration to be central to *Running Dog* from the outset of the writing process. His research clippings for the novel include, amid several articles on Hitler and Chaplin (both individually and as a connected pair), a 1977 *New York Times* article recounting Fox Movietone News' attempts to preserve its deteriorating collection of unique World War II newsreels. This collection suggests that the material of film itself is as much of a driving image for the novel as either of the historical icons it engages. The *Times* article describes a process of preservation that entails copying newsreels from the inexpensive, "highly perishable nitrate film" used during wartime rationing onto "modern, long-lasting acetate" (Lichtenstein 52).⁴⁰ Grace Lichtenstein, the author of the article, describes the danger of filmic disintegration as a Holocaust-like threat in and of itself: "officials fear numerous reels of such events as World War II could soon literally turn into ashes" (52).

Lichtenstein's description imagines these documents as cinematic bodies in danger of

⁴⁰ Lichtenstein's article begins with a mock-newsreel announcement of its own concerns that might serve as a capsule summary of the novel that it helps to spawn: "A race against time! Secret vaults and dogs with a nose for news! History crumbles before your eyes!" (52). The phrase "highly perishable nitrate film" is underlined in DeLillo's copy of the article, providing a visible indication of the importance of this material contingency for his conceptualization of the novel ("Research materials").

being erased from history, bearing the mark of the Final Solution down to their chemical composition. Yet these bodies also have the potential to be outwardly destructive and dangerous in their own right: Don Silz, an archivist and researcher quoted in the article, describes the poisonous and flammable condition of deteriorating nitrate film as expanding out of its container “like a cancer,” in effect reproducing itself even as it holds the potential to consume itself (52). Given this conflicted material status of celluloid film as both endangered and dangerous, the act of transposing cinematic material that the article describes—an attempt to assume control of its metastasizing expansion by putting it through a process of transferential reproduction—is a similarly conflicted gesture. This gesture is designed both to preserve film and to contain it; it is thus an intervention that functions both on behalf of film as a reproducible medium and in defense against the extreme stakes of its reproducibility.

DeLillo’s attention to the problems and possibilities that emerge within such a specifically historically grounded situation of cinematic materiality and reproducibility is central to the way in which he imagines novelistic form in *Running Dog* as an intervention within media technology. Through the novel’s formal engagements with cinematic material and technique, he situates writing as a reproductive technology capable of engaging history not only at the level of the event but also in terms of the technologically produced information that records and constitutes the events that make up history. The acts of obtaining, transcribing, and recombining this information become crucial narrative operations under this schema. In this sense, DeLillo’s focus on cinematic form and technology works as an extension of the parameters of historiographic

metafiction, a central device of the postmodern and contemporary novel.⁴¹ By mobilizing historical and fictional films in the same way that novels of historiographic metafiction mobilize historical and fictional characters and events, *Running Dog* operates as a novel of mediagraphic metafiction. Staging the textuality and materiality of the bunker film across a number of moments in the novel, DeLillo imagines a technological pastiche within language on the surface of the page. He uses the novel's text as a means for dissecting and recombining different units of mediated information in order to explore both how sonic and visual technologies capture, store, and disseminate information and how and where language and written text might intervene within those technologies. *Running Dog*'s central problem of the retrieval, reproduction, and representation of its missing visual text serves as a crux around which to dismantle the traditional logic of film in terms of both content and form, and by dismantling this logic, DeLillo in turn offers a corresponding dismantling and reconstruction of the print novel as a technology of material transcription. By attending to this question of technological media's reproducibility and materiality—and thus to the problems and possibilities that emerge in the shifting form(s) of technological inscription and storage—alongside the intertwined cultural legacies of Chaplin and Hitler, DeLillo announces a form of novelistic authorship in which writing plays a reproductive role not unlike that of the film archivist, if perhaps somewhat more complex and multidirectional. Excavating, preserving, transferring, and mixing media information thus become decisive narrative operations, the novelist's means of both critically engaging the structures of media technology and, more importantly, appropriating those structures for his or her own purposes.

⁴¹ See Hutcheon and Jameson for seminal theories of this technique.

Before I turn to *Running Dog*'s more explicit moments of mediagraphic prose, I want to consider briefly the theoretical implications of the conceit of the bunker film. By situating this extreme object as the central object driving the novel, DeLillo attempts to imagine a limit case of cinema as both an art form and a technology in order to engage the operations of cinema at the most fundamental level. The bunker film promises to be the ultimate document ("unedited footage. One copy. The camera original" [18]) of the ultimate spectacular persona of the twentieth century (Adolf Hitler) engaged in the production of the ultimate moving-image genre (unstaged, orgiastic pornography). For the characters in the novel, this film is both literally and figuratively unspeakable. In response to Moll's initial questions regarding the film, Lightborne can claim that it exists, but with regard to who or what appears in the film, it seems possible only to say that "[t]hings get vague here. But apparently it's a sex thing. It's the filmed record of an orgy, I gather, that took place somewhere in that series of underground compartments. . . . I don't believe it myself" (19). Lightborne's ambiguity is both a function of his own seduction by the film and something inherited from the man from whom he hopes to purchase it, who described it as: "[a] performance . . . that would surely take its place among the strangest and most haunting ever given. He also said I wouldn't be disappointed in the identities of those taking part. All this and yet he wouldn't give a straight answer when I asked if he'd seen the footage himself or were we dealing in hearsay" (19). Whether or not Lightborne's contact has seen the film, this provocatively opaque hearsay is certainly the currency in usage for all interested parties, a mode of discourse that continues to dominate references to the film over the course of the novel. In a later conversation, for example, government operative Glen Selvy, who is also

attempting to acquire the film, notes vaguely that with “[a]ll those people [in the bunker], things could happen” (51), and Lightborne later acknowledges that while there is “some basis” for believing that the film includes Hitler, “[t]he rumors have never specified the old boy” (147). As this euphemistic reference to Hitler suggests, his name is rarely if ever directly linked to the imagined content of the film.⁴² This absence within language epitomizes the way in which the film becomes monolithic in its invisibility as a media object within the narrative. Indeed, no direct description of the pornographic film the characters are imagining and seeking ever emerges in the novel, only language that hedges around its alleged content—allegation and speculation, in fact, are the only forces that produce this film at all. This condition serves as an extreme case of both the untranslatability of visual images in general and the unspeakability of film as a system of objects requiring complex technological mediation in order to yield meaning.

Yet in spite of the indirectness with which the language of the novel performs the inaccessibility of the bunker film at the levels of discourse and narrative, the actual content of “the item in question” (18) is never less than fully clear. The image at the heart of DeLillo’s conceit—Hitler *in flagrante delicto*, as it were—seems to need no description because it already exists in the collective cultural imaginary. In fact, whether the acts imagined on film actually transpired and were recorded as imagined is far less important to the novel’s characters than the contingent, yet profoundly seductive, possibility that they might have. In this sense, the rumors of the film cater to the constellation of impulses that Susan Sontag explores in her 1975 essay “Fascinating

⁴² In a different passage in the typescript draft for the novel, DeLillo uses a similar epithet, “the old boy himself,” to replace the “the unmentionable name” as a reference to Hitler (“Typescript Draft”). This latter euphemism stages the paradoxical appearance and disappearance of Hitler’s name and the bunker film even more forcefully at the microscopic level of language.

Fascism.” Like Lightborne, whose flat statement, “If it’s Nazis, it’s automatically erotic” (52) almost seems a parodic reduction of her argument,⁴³ Sontag suggests a “natural link” between fascism and sadomasochism based upon a shared quality of spectacle and theatricality: “[t]oday it may be the Nazi past that people invoke, in the theatricalization of sexuality, because it is those images (rather than memories) from which they hope a reserve of sexual energy can be tapped” (104). For Sontag, the foundational site of this theatricalization is *Triumph of the Will*, Leni Riefenstahl’s propaganda film of the 1934 National Socialist Party convention, a text of pornographic “ecstasy” in which “the leader makes the crowd come” (102). The bunker film, with its amateur mode of production and its promised images of Hitler’s own ecstasy at the very end of his rule, serves as an aesthetic counterpoint to the epic scope of *Triumph* as well as a chronological bookend to Hitler’s cinematic oeuvre. Discussing the novel in relation to Sontag’s essay, Mark Osteen argues that “just as fascism produces a pornography of power, so pornography, in *Running Dog*, is a form of fascist representation” (106). Yet rather than completing the equation that these arguments pose, the novel’s specter of a pornographic film starring Adolph Hitler overloads it entirely: if fascism is always already pornographic, and pornography always already fascistic, DeLillo asks, what is the status of fascist pornography? DeLillo’s use of the bunker film as a cinematic limit case emerges out of this convergence of generic, ideological, and technological extremities. Film history is filled with myths of the beginnings of cinema—stories of a credulous audience fleeing the image of an oncoming train at the Lumière brothers’ 1895 showing of *Arrival of a*

⁴³ Later in the novel, Lightborne explicitly underscores the novel’s connection to Sontag’s essay in a moment of quasi-Heideggerean etymology: “Fascinating, yes. An interesting word. From the Latin *fascinus*. An amulet shaped like a phallus. A word progressing from the same root as the word ‘fascism’” (151). Here DeLillo seems not only to “synthesize[] the novel’s themes,” as Osteen suggests (106), but also to invoke directly the title of Sontag’s essay.

Train at La Ciotat Station, for example, or of Georges Méliès' "accidental" stop-motion cut creating the illusion of a woman transformed into a carriage.⁴⁴ The myth of the bunker film operates instead as a myth of the end of cinema under a crystallization of cultural and technological pressures, dually encroached upon by the specter of Hitler in its past and the onset of video in its future.

By posing this search for a missing film to end all films as the structuring conceit of *Running Dog*, DeLillo also anticipates "the life or the afterlife of cinema" as theorized by Gilles Deleuze in the conclusion of *Cinema 2: The Time-Image* (270). The issues of history and chronology in Deleuze's two-volume study of cinema are highly vexed ones; in the conclusion of *Cinema 2*, Deleuze makes perhaps the clearest historical gesture in the *Cinema* books, turning to the question of the aesthetic and political potential for cinema in the face of informatics and the then-emergent electronic image. For Deleuze, the central distinguishing characteristic of cinema is its self-reflexive thematization of its own technological condition:

there is something specific to cinema which has nothing to do with theater. If cinema is automatism become spiritual art . . . it confronts automata, not accidentally, but fundamentally. . . . The man-machine assemblage varies from case to case, but always with the intention of posing the question of the future. (263)

Deleuze interweaves his consideration of the shift from the clockwork automata of celluloid film to the electronic automata of video with another vector of media change, namely Hitler's rise to power in political and cinematic terms. Drawing on Walter Benjamin's argument in "The Work of Art in the Age of Mechanical Reproduction"

⁴⁴ For discussions of these narratives of the Lumières and Méliès as moments of myth-construction within the history of cinema, see, respectively, Gunning and Cubitt.

about the implications of fascism's simultaneous "violation of the masses" and "violation of [cinematic] apparatus" (241), Deleuze suggests that Hitler's dictatorship is not only a control of politics attained at least in part through cinema but ultimately also a control of cinema itself, a seizure he compactly describes as "Hitler as film-maker" (264)—that is, as a supremely powerful manipulator of moving images.

For Deleuze, the most compelling critical response to this dual seizure of politics and cinema is the work of German filmmaker Hans-Jürgen Syberberg, particularly Syberberg's encyclopedic *Hitler, a Film from Germany* (1978). *Hitler* consists of a massive, seven-hour stream of staged monologues and narratives delivered by a mixture of actors and marionettes representing everything and everyone from Hitler and the members of his inner circle to Thomas Edison to figures from German mythology. This overwhelming informational excess seeks to body forth in cinematic terms the devastation laid upon history by Hitler, a "trial" put on "by cinema . . . inside cinema" (Deleuze 264). In this sense, its sprawling excess and artificiality provide a reciprocal counterpart to the claustrophobic, short, haunting *verité* of the bunker film. Deleuze says of Syberberg's cinematic response to Hitler that

"Hitler in us" not only indicates that we made Hitler as much as he made us, or that we all have potential fascist elements, but that Hitler exists only through pieces of information which constitute his image in ourselves. . . . Syberberg's powerful idea is that *no information, whatever it might be, is sufficient to defeat Hitler*. All the documents could be shown, all the testimonies could be heard, but in vain: what makes information all-powerful (the newspapers, and then the radio, and then the television), is its very nullity, its radical ineffectiveness. Information

plays on its ineffectiveness in order to establish its power, its very power is to be ineffective, and thereby all the more dangerous. This is why it is necessary to go beyond information in order to defeat Hitler or turn the image over. (269, emphasizes original)

Just as “the camera’s everywhere,” in Moll’s words, Deleuze argues that Hitler and the information that reproduces him “in us” are similarly ubiquitous, all-consuming, and irreducible. This information, Deleuze seems to suggest, constitutes a much larger category than merely the specific information directly produced by or about Hitler. Through this wider scope he makes a claim that is correspondingly far more wide-sweeping than a simple critique of Hitler as propagandist and dictator: Deleuze suggests that information itself as we know it in contemporary culture, the sum total of mass media production, is a Hitlerian invention, and that in our deep reliance on this information, we reproduce the dynamics and power structures of fascism. This critique shares common ground with any number of other formulations of the problem of the postmodern culture of electronic media, a condition Deleuze describes in terms of “the screen itself . . . constitut[ing] a table of information, an opaque surface on which are inscribed ‘data,’ information replacing nature” (265).⁴⁵ Of course, DeLillo himself takes up the problem of electronic media along strikingly similar lines in *White Noise* (1985), satirizing the convergent worlds of a fictional collegiate “Hitler studies” department as the apex (or nadir) of depoliticized postmodern culture and the technology and culture of television, hyperbolically described by the character Murray Jay Siskind as “offer[ing] incredible amounts of psychic data. It opens ancient memories of world birth, it

⁴⁵ Many of the more reactionary readings of media in the novel share Deleuze’s anxiety about electronic media. For other examples of varying critical perspectives on this issue, see Jameson, Sobchack, Rodowick, and Derrida and Stiegler.

welcomes us into the grid, the network of little buzzing dots that make up the picture pattern” (51).⁴⁶

I would suggest, however, that instead of either surrendering to postmodern media saturation as an unavoidably colonizing force or arguing for a wholesale withdrawal from it, Deleuze outlines a different, more microscopically engaged response, one that DeLillo’s work in *Running Dog* explores in novelistic terms. As Deleuze’s calls to “go beyond information” and to “turn the image over” suggest, the course of action he outlines is rooted in a radicalization of cinematic technology and form. Further considering the conditions produced by Hitler’s rule, Deleuze goes on to state that

[r]edemption arrives too late[.] . . . [I]t appears when information has already gained control of speech-acts, and when Hitler has already captured the German myth or irrational. But the too-late is not only negative; it is the sign of the time-image in the place where time makes visible the stratigraphy of space and audible the story-telling of the speech-act. (270)

Like *White Noise*, *Running Dog* takes place within this time-space of the too-late. The aesthetic and political potentials of cinema seem superseded by the colonizing forces of the electronic image, and just as the novel’s characters themselves bear the mark of “Hitler in them,” speaking and acting through the readymade material of mass visual media, the only cinematic work that holds any significance to any of them is a document of fascist pornography. Yet at the same time, the novel extracts the potential for critically progressive image production from the condition of the too-late: the constant deferral of the bunker film that provides the novel with much of its narrative suspense—as well as

⁴⁶ For examples of critical studies of *White Noise* in terms of this convergence, see Cantor; Lentricchia, “Tales;” Duvall; and Osteen.

the disappointment that provides a conclusion to this suspense—actually function to establish a formal framework for imagining a transition in reproductive media processes. In the cinematic scenes distributed across this structure of deferral, DeLillo pursues a novelistic task not of critique, parody, or renunciation, but instead of transcription and recombination. By using text as a technology of mediated reproduction—effectively replaying key cinematic moments for the novel within the pages of the novel—he imagines ways in which the novel might “make[] visible the stratigraphy of space and audible the story-telling of the speech-act” within cinema in novelistic terms. Following Habib’s attention to cinema as at once both mythically eternal and materially ephemeral, DeLillo’s strategy of replay imagines the politics of the time-image as an archival project, through which cinema’s “trace of historical time rendered *visible* . . . can become even more *visible* if gaps and accidents fragment and stain the film. The film archive is a strange tomb, characterized by what it lacks, and slowly decomposing” (Habib 122). If cinema’s material composition (and decomposition) render it paradoxically both more vulnerable and more visible, DeLillo’s transcriptive writing extends and transposes that paradox, restoring and archiving imagined cinematic material precisely by fragmenting it and producing gaps within it. This does not mean, however, that in doing so DeLillo necessarily argues for the novel as wholly or singularly capable of contesting, resisting, or (to use Deleuze’s term) redeeming any other technology within the ecology of contemporary media, much less of wholly redeeming itself. On the contrary, precisely by trafficking heavily in mediated information rather than attempting to place the novel outside of contemporary media ecology, DeLillo extends the critical project of *Running Dog* past a standard indictment of postmodern media simulation. In turning over an

exhausted image, in seeking the path of a lost, even nonexistent film, *Running Dog* traces the material contours of image reproduction, circulation, and storage rather than of representation; rather than contesting or resisting other media forms, DeLillo attempts to register and appropriate the reproductive operations of cinema through writing, using text to test the properties and limits of literary form through the properties and limits of cinema.

Notes Towards a Film

DeLillo stages this process of technological appropriation through a narrative that takes the form of a fusion between the thriller genre and the quest legend. On one level, the novel carries out this quest at the level of character and plot, and as several critics have noted, it resembles a sort of postmodern grail narrative, its flat, affectless characters competing for an object whose importance—sexual, cultural, historical—inevitably seems to boil down to its capital exchange value.⁴⁷ John Johnston, for example, argues that the novel's characters are “hardly characters at all, inasmuch as they lack a significant mental life and seldom reveal signs of a complex psychological interiority,” and that rather than having these attributes, they function merely as “sites where a particular configuration of forces and social pressures in the culture medium crystallize or precipitate out as patterned sets of recognizable interests and responses” (174).

⁴⁷ On the quest motif in the novel, see McClure and Osteen. On the novel's use of the thriller genre, see Frow, *Marxism*. To the extent that the novel does operate at the level of genre, it is as much a mobilization of the conventions of the pornographic film as it is of the thriller: DeLillo intersperses its convoluted plot and stilted, forced dialogue with scenes of arbitrary, anonymous sexual coupling, pointing toward the promise of a climactic, orgiastic money shot that it (deliberately) fails to deliver.

Johnston's formulation is insightful in its grasp of how DeLillo's structuring of character and subjectivity in *Running Dog* echoes his structuring of the bunker film as a site where multiple images converge. Indeed, Johnston's claim implies that the "characters" of *Running Dog* are not so much characters as themselves collections of images similar to the films that populate the novel along with them. In turning to the mediagraphic moments within the novel, I want both to extend the reach of Johnston's reading and reverse its emphasis: if *Running Dog*'s characters are shaped in the image of its films, as images in and of themselves, and if it is the actions and relations of the novel's characters that provide a catalyst for those films rather than the other way around, then it is those films that warrant the closest, most sustained analysis and attention. Johnston's reading marks a point beyond which consideration of character in the novel must give way to a consideration of cinematic material: if the writing of a novel around film makes such a claim about character under the regime of the moving image, what claims does it make about writing itself, particularly about writing's investment in and ability to participate in the processes of media reproduction it addresses?

The relationship that develops between Moll and Selvy—the closest characters the novel has to protagonists or leads—exemplifies this way in which the novel's character dynamics serve and point towards media dynamics. As Moll begins to investigate Selvy as part of her research, she becomes sexually involved with him in an almost arbitrary fashion. As often happens to characters in DeLillo's novels (perhaps most notably in the early sections of his first novel *Americana*), media images permeate her thoughts at key moments in their relationship. After their first encounter, her mind flashes on Michelangelo Antonioni's 1970 film *Zabriskie Point* (40), and in "a run-on

series of images” that she “half dream[s]” after a subsequent time in bed with Selvy, she imagines him “in a military setting . . . a dog tag around his neck. Maybe she was mixing Monty Clift into it, in *From Here to Eternity*. . . . Without turning his way or reaching an arm across the bed, she knew he was no longer there” (42). These two early moments—particularly the second one’s “mixing” flow of images—show signs of an emergent cinematic consciousness structured by media images not only at the level of reference but at the level of perception. Yet Moll’s thoughts in these moments still rely on subjective (if at times unconscious) recollections, thus largely using character to introduce media as a context for character reflection.

In her third encounter with Selvy, cinema makes a much more extensive appearance, reversing the causal dynamic of the earlier encounters. Filling the gap within their arbitrary relationship, media colonizes traditional subjective character in this scene in a way that begins to figure a different mode of writing. Heading home from a meeting with her editor, Moll randomly runs into the image of Charlie Chaplin and the body of Selvy in rapid succession: “It was late afternoon when Moll hailed a cab that took her past the Little Carnegie, where a special Chaplin program was playing. She found Selvy waiting in her apartment and decided not to ask how he’d gained entry. Bad taste, such questions. An insult to the ambivalence of their relations” (59). The two quickly fall into bed together, and after sex Chaplin’s image reassumes control of Moll’s thoughts: “I just remembered something. . . . We’re going to the movies. I just realized. There’s a Chaplin program at the Little Carnegie and we’ve got four and a half minutes to get down there” (60). This abrupt shift of focus on Moll’s part is followed by a dramatic shift in the novel’s tonality and mode of inscription: DeLillo abruptly cuts to a page-long

encapsulation of Chaplin's *The Great Dictator*, the parody of Hitler that Hitler in turn parodies in the bunker film at the end of *Running Dog*. The passage in *Running Dog* that recapitulates the film appears entirely in italics, spatially separated from the text around it, without any clear transition or introduction from what precedes it. It operates as both an element within the novel's narrative progression and a break from it, with DeLillo using text as a technology of transcription and transmission, relaying and delivering the preexisting content of Chaplin's film. Through this disjunctive presentation, DeLillo situates the passage as an instance of technological playback rather than a narrative scene of human spectatorship. Moreover, by producing the cinematic information of the passage as an autonomous entity through these various techniques, he claims for *Running Dog* an independent reproductive autonomy.

Chaplin's film, originally released in 1940, capitalizes on physical resemblances between himself and Hitler in order to tell a story of mistaken identity between Adenoid Hynkel, a Hitler-like dictator of the fictional nation of Tomainia, and a Jewish barber, with both roles played by Chaplin. The two characters exist in parallel plots until late in the movie, when Hynkel disappears in a hunting accident. The barber is mistaken for the dictator and brought to speak at a rally, where instead of inspiring the crowd towards fascism, he abdicates his misattributed position as dictator, calling for peace, humanity, and kindness. In addition to raising the broader issues of technological reproduction and mediation that I discuss below, DeLillo's choice of *The Great Dictator* in particular merits consideration itself: why these images of Hitler-in-us, rather than, say, the far more renowned examples in Riefenstahl's films? Why does a novel so concerned with Hitler's specter over mass media rely on physical comedy rather than documentary

propaganda to stage its climactic revelation? What role does Chaplin's film play as both a narrative device and a piece of technical source material for DeLillo's rethinking of the material interface of cinema, politics, and the novel? Of course, the most immediate and obvious reason for this choice lies in the physical resemblance between Chaplin and Hitler that provides the setup for the ironizing reversal of the bunker film. DeLillo's play upon the relation between the two men's appearances has an antecedent not only in Chaplin's own use of the conceit as a structuring device in his film itself but also in André Bazin's 1945 essay on the film, which theorizes Hitler as a sort of thief of images, having stolen the Tramp's famous moustache ("Pastiche"). Yet *The Great Dictator* resonates with DeLillo's novel on more complex structural levels as well. In each case, the moment of visual confusion that seems to be the text's *raison d'être*, its central, most visible and most infamous narrative element—the barber's masquerading speech and Hitler's filmed pantomime, respectively—only occurs at the very end, becoming a point of narrative conclusion that is ultimately the result of elaborate premises and conceits rather than a premise in and of itself. The end result of both films, then, is on many levels the inverse of what each one promises. Moreover, like the bunker film that draws from it, *The Great Dictator* is itself a film partly lost to history in terms of audience reception. Much of this disappearance from view stems from the barber's final speech in the film; although this speech took on a popularity of its own, with Chaplin himself delivering it several times in public in the years after the film's release, it ultimately precipitated his marginalization and temporary exile as a result of his increasingly strong and increasingly public left-wing stance.⁴⁸ Much criticism of the film sees it as irretrievably trapped in pre-war naïveté, cordoned off on ethical, historical, and representational grounds that

⁴⁸ On Chaplin as a public figure, see Chapter Six of Maland.

effectively keep it from “existing” in the post-war moment⁴⁹—as widely as it might circulate through revivals and video remediations, it remains difficult to see in the larger sense of its political imagination, at once both publicized and isolated through the “nullity” that Deleuze attributes to contemporary information. In this sense, then, DeLillo’s transcription of the film constitutes a “rescue operation” (Habib 120) at the level of the cultural imaginary as well as at the level of media material and process.

In particular, DeLillo’s drafting of this film in text from his initial observational notes to the version published in the novel charts the action of mediating and reproducing the original film, enacting a process of preservation and containment through transposition similar to the archival process that Habib theorizes and that DeLillo himself considers in his research materials for the novel. The earliest version of this passage appears in handwritten form in a pocket-sized notebook. The language in this document is highly condensed, almost as if DeLillo were actually taking notes on a screening of the film, with each phrase or fragment standing in for a scene or sequence of images. Yet this preliminary draft is notable in its striking resemblance to the final published version, both in terms of the scenes, images, and effects from the film that appear within it and in terms of the language used to render them. In this resemblance, the notebook draft is not so much a set of notes in preparation for the imaginative act of writing the passage—raw material for writerly inspiration, as it were—as it is an initial stage of the mediation process that ends in the published version, a first iteration of authorial transference and manipulation of the information of the film. The notebook’s version leaves off just before

⁴⁹ In a review of a 1964 revival of the film, for example, Andrew Sarris describes it as having a “heavy historical anchor holding it in place and time” (12). In an essay comparing it to Art Spiegelman’s *Maus*, Sheng-mei Ma sees the film, and its ending in particular, as “bespeak[ing] a naïve belief in the goodness of the human heart and a convenient didacticism, both possible due to pre-Holocaust obliviousness” (49).

the pivotal moment of mistaken identity—its last note from the film is “Duck hunting” (“Notebook”)—but a number of its sentences and phrases reappear in the published novel with little or no change. The images “infant ~~pees~~ wets on his hand” (with “his” referring to Hynkel) and “stormtroopers ~~painting~~ march and sing” (“Notebook”), for example, appear in the published novel in sequence as in the notebook, and virtually verbatim, as “[a]n infant wets on the dictator’s hand. Storm troopers march and sing” (60). A scene involving the meeting of Hynkel and Benzino Napaloni (Hynkel’s rival dictator and a stand-in for Benito Mussolini) undergoes similarly minor changes in phrasing and sequencing:

There is a military display and a ball in the palace.

~~The dictator~~

Invasion plans are made.

Dictators eat limburger + strawberries.

~~Treaty~~. (“Notebook”)

becomes “*There is a ball in the palace. The dictator and his rival eat strawberries and mustard. A treaty is signed. The two men team up*” (61). This minimal gap between versions of the passage that appear as transcriptive note-taking and final authorial writing, respectively, makes an argument of its own: it suggests that the final product is not only descended from the notes in a manner that is highly immediate (in every sense of the word), but indeed modeled on their practice. The prose of DeLillo’s finished product documents and bears the traces of remediating and rerouting the images contained within Chaplin’s film. To use Deleuze’s terminology, DeLillo’s writing process turns these images over by turning them into words. DeLillo rarely elaborates upon or embellishes

the contents of the film and notebook over the course of the drafting process, and in all versions of this passage, his transference serves as a skeletal recapitulation of the events of the film rather than as an exploration of actorly gesture or expression or cinematic composition outside the scope of any given single shot. From notebook to publication, the passage contains a series of images that register as the bare minimum necessary to retain the trajectory of *The Great Dictator*, and for all of the spectacular visual and ideological resonances among the images in Chaplin's film, DeLillo's prose shows less concern with the information as such that those images convey than with the operation of transferring that information into words, producing and reproducing text in order to restage visual images within another medium.

The most dramatic feature of the transcription of *The Great Dictator* that appears in DeLillo's notebook is not an effect of language at all. In addition to individual words and phrases being crossed out in the internal process of writing and revision (as visible in several of the examples quoted above), each page of text-images is also crossed out as a whole with a large X. Invoking an entirely different order of magnitude than the individual cancellations, this gesture throws the status of the written marks on these pages into question. The notebook gives no indication as to whether these marks were made periodically over the course of the writing process, with DeLillo checking off each page's worth of text-images as he entered them into the typescript draft, or in crossing off all of the material at the end as a way of marking off the passage as a whole for whatever reason, or at some other point altogether. Whatever the case, DeLillo is, in a sense, marking the pages themselves through this gesture rather than marking what is written on them. His use of wholesale, large-scale Xes instead of singular, one-by-one cancellations

claims the surface space of a given page as an operative unit of inscription over and above whatever text might arbitrarily fall within its confines. In doing so it suggests that something more complex than mere record keeping or crosschecking is at stake in this notebook. Charged by the Xes' grouping of notes into these arbitrary larger blocks, the pages of the notebook become a material recording medium divided into discrete units. The marking of each of these units with an X not only demarcates it but also underscores the extent to which DeLillo's writing in *Running Dog*—and indeed perhaps any writing engaged with material from other media—tangibly and materially bears the traces of the images and other information it addresses. In making a mark that is effectively beyond language, DeLillo claims the images of the film as his own, using the X as a gesture of transference and augmentation rather than of deletion or cancellation. In the pages of the notebook, X marks a process rather than a spot; it stands as the nonalphabetic trace of the author's archival appropriation of *The Great Dictator*'s cinematic material through transcription.

The development through revision of two scenes from the *Great Dictator* passage that explicitly thematize technologies of recording and reproduction show writing's entry into these technological processes at work. In these passages, DeLillo shifts from responding to the technologies represented at the level of narrative to appropriating cinematic technology at the level of form. One of the first paragraphs in the passage, which reproduces a scene early in the film involving Hynkel's speech at a rally (a direct parody of *Triumph of the Will*), changes relatively little in its content and focus from DeLillo's notebook to the final published version. DeLillo's notes on the scene appear in three separate fragments on the first page of the notes: "dictator's words, microphones +

loudspeakers, shaking,” “Gutturals, ”and “Microphones recoil” (“Notebook”). In this sequence (which is intercut in the notebook version with contrasting text-images of the “barber – gestures + monosyllables”), writing describes technology, recording its role in the scene in a fairly traditional narrative sense. This approach varies minimally on the way to the final published text: the typescript presents the scene as “The dictator addresses the multitudes. He speaks in strangulated tirades. ~~It is~~ A linguistic subfamily of German. The mjcrophones [sic] recoil,” a passage that reappears in the final version unchanged save for editorial changes that incorporate the deletion of “It is” and correct the spelling of “microphones” (“Typescript with Notes”). The manuscript typesetter’s copy (the last available version prior to the novel’s publication) contains a version of the scene with slightly different opening sentences—“The dictator addresses the multitudes using gutturals to a large degree. There are often microphones and loudspeakers around him”—which are hand-corrected to arrive at the final version. Although ultimately deleted, the second sentence here, with its technological apparatus appearing “often,” introduces an element of instability into the act of textual recording; the inclusion of such an indeterminate descriptor underscores the fact that the sentence stands in for a number of discrete cinematic shots, with some showing the microphones and loudspeakers but others not, a gesture that records and consequently subverts the very process of compaction it attempts to perform.

The revision of the scene showing Napaloni’s arrival performs the inverse action, developing towards a more integrally mediated and technological piece of text at the level of form. In the notebook version, recording technology is almost an afterthought:

Napaloni arrives

Train keeps missing red carpet.

There is a lot of saluting. The two men are followed by cameramen. (“Notebook”)

The typescript, however, introduces a crucial and radical layer of technological mediation: “The dictator welcomes a rival tyrant to his country. The man arrives in a two-dimensional train. The leaders salute each other for many frames” (“Typescript with Notes”). This version of the passage not only presents Napaloni’s train as an artificial effect, with its “two-dimensional[ity]” a detail that unmistakably places the mark of the cinematic image on DeLillo’s language, it also imagines itself in cinematic terms, measuring the length of the scene it records in frames of film rather than in moments or seconds of organic human time. A subsequent typescript draft reverses this gesture, returning to an approach closer to that of the notebook: “The dictator welcomes a rival tyrant to his country. There is a scene with a train and a scene with barber chairs. A lot of saluting. Cameramen everywhere” (“Typescript Draft”). The final published version of the scene, however, returns to the verbatim text of the earlier typescript. Thus the language of the passage shifts back and forth between documenting the presence of media within the narrative (with the scene as a media event, documented by “cameramen”) and presenting itself as a piece of imaginary media composed of frames and two-dimensional images. By ultimately retaining this latter status of the text, DeLillo explicitly uses the passage to foreground *Running Dog* as itself a technology that engages with the other technologies around it, recording and reproducing them in a mediated form on the page.

The setting of the *Great Dictator* passage in italics, which does not occur until the final draft, underscores this status. Its alteration of type stands in for the effect of graphic

marking achieved by the notebook's Xes, explicitly resituating the passage as a series of images transcribed as text. Using this visual device to set off and highlight a passage largely composed of deliberately flat, affectless language, DeLillo renders the text of the passage newly visible *as* text rather than as abstract language, palpably and materially inscribed on the page as if on the screen, with an orthographic physicality intended to be seen as much as to be read. By italicizing the text of this passage in reference both to the images of Chaplin's film and to the visual effects of his own draft materials, DeLillo draws attention to its intermedia status and thus gives it a location of its own within the constellation of media forms shaping the scene and the novel as a whole—namely cinematic images, handwritten markup, and the standard appearance of “traditional” printed literary text. The closeness of the *Great Dictator* passage's italics to this standard appearance speaks to the potential limitations prose writing has in representing and imaginatively absorbing moving images. Indeed, as with any reproductive process, this transference of image to text can never be comprehensive or exact, even at the imaginative level. Even the archival transference of old newsreels to higher-quality film stock DeLillo considers in his research for the novel constitutes a shift in the means of storage that modifies the status of the information being stored at a fundamental level; augmentations, excisions, intrusions, and distortions inevitably take place when information is reproduced across media, and would occur even if the images of *The Great Dictator* themselves appeared on the pages of the novel as if on the cinematic screen. Yet the italicized status of the text lends it an almost palimpsestic effect, with the words of the passage altered as if by the pressure of the sedimentation of media material under them—Hitler's legacy of images and information, Chaplin's cinematic response, and

DeLillo's own transcriptive documentation. Rather than attempting the impossible task of reproducing the film as such within text, this passage attempts to trace the borders between *The Great Dictator*'s information production and the novel's own, transposing the material of Chaplin's work to rethink the roles of language, text, and materiality within the film and the novel.

Thus bearing forth the traces of this sedimentary accretion, the published version of *Running Dog* registers not as a "finished" product or finished commentary on this media material, but rather as another iteration in an ongoing sequence of mediation and reproductive revision, subject to the media production that has come before it but also capable of redirecting and reshaping that production. The novel's presentation of the film shifts between two modes of discourse that, taken together, encapsulate DeLillo's process of critical and archival transcription. Some moments in the passage make a clear intervention upon the images they transmit, reflecting upon their content as in the description of the film's final scene:

The barber, or neo-tramp, who is the dictator's look-alike, assumes command, more or less, and addresses the multitudes.

A burlesque, an impersonation. (61)

Here the presence of an authorial voice is clear: rather than transposing the elements of the scene as directly as possible, DeLillo's language registers equivocation and evaluation, transgressing the limits of the scene as a discrete, fixed unit of cinematic information. In contrast, a number of other moments do function merely as transmission of content in a way that extends the transcriptive and reproductive approach of DeLillo's

notebook, their finished language giving little more than descriptions of shots or scenes, as in the first two paragraphs of the passage:

The dictator in uniform.

Each of his lapels bears the double-cross insignia. His hat is large, a visored cap, also with insignia. He wears knee-high boots. (60)

In fragments such as these, DeLillo tests the potential shape of novelistic text as a reproductive delivery system. While the first category of evaluative moments claims a power of critique and intervention for the written word in dialogue with the image, the moments that more closely approximate a solely transcriptive approach carve out a more problematic role for written textuality, pushing it away from the realm of voice or thought and towards a material imagehood of its own.

Charged as images in a fashion that is radical, yet inevitably incomplete, these textual fragments function in a fashion that resonates with what Deleuze describes as the status of text within silent cinema as a “read image” (226). A number of these phrases, such as the above description of the dictator or the language standing in for the scene in which “[t]he dictator goes duck-hunting and falls out of his boat./ Mistaken identity” (61), read like intertitles to a silent film. Yet as Moll recalls after watching the film, *The Great Dictator* is not a silent film. Quite the opposite, it is Chaplin’s first talkie, a late adoption of sound technology in comparison to his peers, and alongside the investigation of political power and dictatorship, the implications of sound and speech constitute a key theme of the film. Thus DeLillo’s mediation of the film is at once both a necessary transcription for a series of images that cannot play or show itself on the printed page and also a superfluous stream of intertitles for a film that already claims (albeit

problematically) the power literally to speak for itself. He delivers the film as it exists in memory, as a silent film, rather than as the sound film that it is. By negotiating the dissonance between those two states, the flatly descriptive phrases of this passage stake out a new position within the layerings of image and sound in and around the film, one with the potential to be both reproductive and powerfully responsive. The problem of transcribing the film within the novel, then, becomes more than one of rendering image as text: by staging this problem through a text in which changes in technological recording and reproduction are a central theme, and by reshuffling the delivery of the information contained within that text, DeLillo uses his representation of *The Great Dictator* to register multiple different technologies across the history of the cinematic image, and, more importantly, to mediate and reconstellate those technologies through textual inscription. Thus DeLillo's transcriptive approach to the scene stakes out a problem at the deeply intertwined intersection of archival materiality and semantics: as novelistic writing stands in for multiple different modes of filmmaking in this scene (always absent processes that can never fully exist on the page), text more particularly stands in for the missing sound of silent film and the missing images of the absent talkie, and in doing so becomes a highly unstable image of its own, manipulating and standing in for sound and visual images in a fashion that is always shifting and never seamless. Through this tactic, DeLillo imagines the printed page of the novel as a material image in and of itself and, moreover, as a medium for storing, separating, and reactivating different registers of information.

Writing in the Camera

The bunker film that ends *Running Dog* provides the final iteration in the novel's sequence of interrelated, multiply mediated textual objects. At the narrative level, the revelation of the film's true content registers as a profound disappointment for the novel's characters and readers (at least those readers with any conscious or unconscious investment in a conventional narrative fulfillment). This deflation of suspense at the level of action produced by the image of Hitler as Chaplin only confirms the conceptual paradox that has already become clear within the terms of the novel: while the bunker film is an unreproduced image to end all images, it is nonetheless also merely a further stage in a vertiginous circuit of appropriation running from Hitler to Chaplin and now back again. Moreover, as the tightness of this loop makes clear, this image has always been potentially present. An acute manifestation of Hitler-in-us, the bunker film of Hitler as Chaplin is a potential, mythic image on the same level and in the same way that the image of Hitler in the throes of an orgy is; neither one necessarily holds any primacy over the other. Some commentators on the novel have suggested that in tracing further the circuit between Hitler and Chaplin, DeLillo reduces the conditions of reproductive technology that mediate this circuit to a situation of universal simulation. Scott Rettberg, for example, suggests that the "layered" simulacrum of the bunker film can be condensed to "[p]eople with an idea of Hitler watch[ing] a film of Hitler that is not Hitler but Hitler pretending to be someone pretending to be Hitler." For Rettberg, "[t]he incongruity of this Hitler with the idea of Hitler blurs the lines to the point where one watching could not say which Hitler is the more real" (4).

Such a reading sits at the intersection of two critical approaches. On the one hand, the emphasis on simulation as a narrative device suggests that the film constitutes a

particularly complexly mediated case of the nested and interpenetrating worlds within worlds cataloged as central tropes of high postmodern narrative by Brian McHale in his influential 1987 critical text *Postmodernist Fiction*. Rettberg's language also resonates on a more broadly cultural plane in its implicit comparison of the bunker film to *White Noise*'s "most photographed barn in America" (12-13), perhaps the most talked-about image in DeLillo's early oeuvre. Following from Murray's remark that "[o]nce you've seen the signs about the barn, it becomes impossible to see the barn" (12), a number of essays on *White Noise* have situated the barn as a crux of DeLillo's status as a novelistic critic of postmodern Baudrillardian simulation.⁵⁰ Yet contrary to both of these perspectives, and indeed also to the outward appearance of this narrative denouement, the material of the bunker film does not make the same claims about media reproduction and representation as the figure of the barn does. Through the form and technique DeLillo utilizes to represent this material, he thematizes issues of reproduction and representation in a manner more nuanced than this critical trend would suggest. By presenting the bunker film in a manner derived from the form he uses in the *Great Dictator* passage, he suggests not only that it is indeed possible to talk critically about such a film (and consequently about media reproduction in general), but also that taking the film apart, turning it over through language, is an urgently necessary critical gesture, regardless of its potentially limited scope.

DeLillo uses two different linguistic registers in order to think through the reproductive status of the bunker film and to use it in turn as a site for testing new modes

50 See Frow, "The Last Things;" Rettberg; and Osteen for examples of such readings. This passage has also been anthologized in McCaffery's *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodern Science Fiction*. The prevalence of the passage in the scholarship on *White Noise* illustrates a certain formation of this scholarship in the image of the novel's own concerns, almost as if it were impossible, or at least very difficult, to see DeLillo's work outside of the barn.

of writing in response to media. In one register, which dominates much of the scene, language flows out in a fashion that seems as unmediated as possible within the novel, such as in some of its early moments:

Plaster is cracked in places. On other parts of the wall it is missing completely. The lights in the room flicker.

Three children appear. A girl, perhaps eleven, carries a chair. Two younger children, a boy and a very small girl, drag in a second chair between them.

The children set the chairs on the floor and walk out of camera range.

There is a disturbance. The picture jumps as though the camera has been jarred by some brief violent action. (225)

Here the images of the film appear almost as if they were simply observed and rendered in the language of standard narration; the description is flat, reflective of the banality of the scene, but it is not fragmented or obviously mediated in and of itself. In this sense, this mode differs from much of the language in the *Great Dictator* passage, as well as from much of the novel proper outside of these cinematic moments. Indeed, when the camera does explicitly appear within these observational moments, it registers as a conduit for something like documentary realism. While the camera jumps and shakes from the shelling outside the bunker, lending an air of urgency to the passage, most of the time it “*is immobile. It does not select. People pass in and out of its viewing field*” (226). To the extent that the camera (and thus the scene’s language) serve plainly to record such moments rather than explicitly to intervene in them, the passage marks the bunker film as a home movie, and perhaps also even as a strangely anachronistic product of the home

video technology emergent at the time of the novel's writing.⁵¹ Adopting this paradigm, it presents the events in the bunker through what Timothy Corrigan, in an essay tracing the relationship of video to film, describes as

[a] representational technology that continually reframes itself as a visible technology and not a narrative technology[.] It monitors . . . intensities and mobilities . . . and it does so without positioning itself across the narrative and textual structures it participates in; as a technological representation, it is in fact a public monitoring of the temporal movements of private actions. (318-319)

Of course, the extent to which any technology can remain solely one of non-interventive monitoring is always in question, but it is nonetheless clear that these moments in which DeLillo's narration is relatively transparent and fluid differ radically from the other set of moments that constitutes the passage. In this second set, DeLillo's language asserts its alignment with the operations and apparatus of recording and reproduction over and against the material itself that is being recorded. In their formal dimensions, the sentences in this category point up the technological status of the film as a whole as it appears on the page, using fragments to disrupt and cut against the banal, naturalizing flow of information that characterizes much of its text. These divergences from narrative transparency demonstrate the extent to which the transcriptive methodologies of the *Great Dictator* passage shape DeLillo's writing here. A number of fragmentary phrases serve to establish the scene and location of the film as well as to foreground the passage's

⁵¹There is of course a complex and overlapping relation between the spheres of the home movie and home video that I invoke here. While the history of home movies in the sense of (seemingly) mundane, domestic events recorded by camera can be said to stretch back through Hitler's inner circle to some of the earliest examples of film itself—most notably in the Lumières' 1895 *Le Repas de bébé*—home video entails both a different technological apparatus and a much more widespread dissemination of that apparatus. For one useful theoretical model of home video, see Moran.

mediated status within the novel: the first line of the text, for example, is the cryptic “*A bare room/black and white*” (225). This juxtaposition (if not necessarily an actual synthesis) of two descriptions of circumstance—one having to do with the physical situation of the room, one having to do with the technological situation of the film—forms a unit of text that is at once both fragmentary and overloaded, as if gesturing towards the sedimentary layers of information that accumulate beneath this single empty image. Other sequences of text, such as

A blank interval.

Again the room. The camera setup is the same. (225, italics original)

or the paragraph that consists only of “[v]isual static. Flash frames” (229), similarly keep the scene’s essence as a product of cinematic technology at the foreground. The description of Hitler’s entrance shows this perhaps most substantively and radically:

For the first time the camera is active.

In a long slow panning movement, it focuses eventually on a figure just beyond the doorway. A man in costume. After an interval of distortion, the camera, starting at the man’s feet, moves slowly up his body.

Oversized shoes, turned up slightly at the points.

Baggy pants.

Vest and tight-fitting cutaway.

A dark narrow tie.

A wing collar, askew.

A battered derby.

A white boutonniere in the lapel of the cutaway.

A cane hooked over his wrist.

Flaccid mouth.

Smoothly curved jaw.

The famous moustache. (234-5)

In this passage, DeLillo uses the space of the page to make a claim upon the reproductive material in play that is considerably more far-reaching than that made by the contextualizing fragments discussed above. As with the transcriptive aesthetic of the *Great Dictator* notebook, the single-image lines used here function as a series of single-shot close-ups in language. However, DeLillo's use of this effect problematizes the material conditions of the bunker film in several ways: firstly, unlike in the case of *The Great Dictator*, there is no actual real-world film from which to transcribe this information. Secondly, the staccato sequence of discrete text-images both directly contradicts the unbroken continuity of the camera's "slow panning movement" that the passage alludes to and also scrambles the expected upward path of that movement, cutting at first from Hitler's collar to his derby and back down to his lapel and then wrist, and later from his mouth down to his jaw and back up to his iconically "famous moustache." Posing an irrational, internally contradictory account of the cinematic text in question, these formal divergences situate the page as a screen upon which text can intervene directly within the imagined framework of the cinematic shot, breaking up the image of Hitler's body and rearranging the resulting components of that image in space and time. Thus the scene of Hitler's entrance, the (anti) climax of the novel's cinematic pursuit, reads paradoxically as both transcription in the mold of the *Great Dictator* passage and new authorial production, as a moment of both transparently "copied"

narration and critically engaged editorial recombination. DeLillo applies the methodology of reproductive image-writing he developed in the *Great Dictator* passage to a series of images that effectively does not yet exist within the reproductive circuit of the novel's world; indeed, he uses those methods of reproduction to bring those textual images into existence for the first time. Through this gesture, he both acknowledges the penetration of technological reproduction within novelistic authorship and announces the ability of writing to work at once both within and against those processes of reproduction so as to create new material, new forms, and new concepts of production altogether. His formal negotiations suggest that new material and new methodologies are necessary to participate critically within an ongoing circuit of reproductive material such as the one that *Running Dog* traces, but they also conversely claim that to participate in such a circuit is intrinsically to produce something new, precisely because of the reproductive circumstances in play rather than in spite of them.

In taking this approach, DeLillo expands what Mikhail Bakhtin describes as “the intentional dimension of stratification in literary language” (292) beyond language itself per se. *Running Dog* is “a dialogized system made up of the images of ‘languages,’ styles and consciousnesses” (49), but also made up of the multiple other forms of media production in circulation around the novel. In reflecting on these forms, DeLillo in turn also reflects on the formal, ideological, and ontological pressures and possibilities they pose to the process of print writing. Through his highly material adoption and appropriation of the bunker film and its operations, DeLillo advances a sort of second-order practice of reproductive authorship over and above the purely linguistic strategies outlined by Bakhtin. Novelistic text can never fully represent or reproduce the image of

film in the way that it can reproduce other languages; it can never fully claim the processes of film as its own.⁵² Instead, DeLillo claims for writing the larger processes of reproduction within which film resides and circulates (even if it does so as an anomaly or aberration, as in the case of the bunker film). A portion of the conversation between Moll and Lightborne while they watch the bunker film provides a gloss on this strategy. The following exchange occurs in reference to a passage of the film's footage that takes place in a different location from the previous passage:

"Where are we?" Moll said.

"Still in the bunker. It's not inconsistent [with the plan of the bunker], the two rooms. . . . Whoever's shooting this film, it could be he's shooting one room, he's stopping, he's walking over to the next room."

"Editing in the camera," Moll said.

"We're getting everything. What do you think? We're getting the one and only take of each scene." (228)

Moll's mention of "editing in the camera" carries multiple meanings here. In cinematic terms, it refers to a process of shooting the different shots of a film in the same sequence as they are to be shown in the finished product, so that little or no cutting or rearrangement is required after shooting is completed. Via this technique, the raw footage shot and the finished product shown are effectively one and the same, as opposed to the more standard Hollywood practice of shooting for post-production editing, in which

⁵² Compare, by way of contrast, Bakhtin's discussion of a solely textual instance of appropriation, namely "the parodic *sonnets* with which *Don Quixote* begins. Although they are impeccably structured as sonnets, we could never possibly assign them to the sonnet genre. In *Don Quixote* they appear as part of a novel—but even the isolated parodic sonnet (outside the novel) could not be classified generically as a sonnet. In a parodied sonnet, the sonnet form is not a genre at all; that is, it is not the form of a whole but is rather *the object of representation*: the sonnet here is the *hero of the parody*. . . . [W]hat results is not a sonnet, but rather the *image of a sonnet*" (51, emphasis original).

scenes are shot out of order for greater efficiency and flexibility. Editing in camera absorbs post-production practices such as cutting and splicing into the act of filming. The modular space of the bunker where the film takes place also points towards a second meaning of “editing in the camera” in this context: *camera* is the Latin root word for “room” in English, and DeLillo’s use of the term in conjunction with such a unique setting suggests that it is the very process of “walking over to the next room,” a motion in space that becomes difficult to comprehend visually within the finished product, that defines the film’s cuts and narrative composition. In the legal usage of the term, *in camera* also signifies action taking place within a closed, sequestered chamber, one that can be understood here as both the bunker itself and the restricted black box of the movie camera. For the unnamed cameraman shooting the bunker film, aware of his own imminent death as well as the death of all those around him, editing in the camera is the only option available for producing something like a final cut. According to Benjamin, the fact that “[t]he camera . . . need not respect the performance as an integral whole” because “the sequence of positional views which the editor composes from the material supplied him constitutes the completed film” is one of the defining aesthetic properties of film (“Work of Art” 228). Under the circumstances of the Allied attack on the bunker, such a recompositional process is simply not viable; the Deleuzian too-late comes to bear in this case upon the producers of Hitler’s legacy, rather than on the receivers. DeLillo situates this impossibility as a point of entry: Moll’s remark that the cameraman is editing in the camera is both a comment on the demands of shooting in the bunker and a reflection on DeLillo’s own authorial practice. While cinematic editing in the camera presents raw footage as a finished (and thus edited) product, DeLillo presents writing in

the bunker film passage as an inversion of this practice: his linguistic and textual cutting and recomposition of Hitler's image produce the "raw footage" of the written passage.

If the recombinations of the bunker film passage are thus DeLillo's exploration of what writing in the camera might look like on the page, the transcriptions and iterations of the *Great Dictator* passage function as writing across the space of the cinematic archive, a parallel incorporation of cinematic materiality and technology into the operations of novelistic authorship. In each of these passages, DeLillo resituates writing in direct response to film by imaginatively placing writing within the black boxes of cinematic technology. Each passage strikes the print of a rare film, while the "main" narrative around these passages struggles to archive and preserve the novel's moments of formal innovation. Both films are, within their respective worlds, disappointments and failures in outward narrative terms: Lightborne feels that the bunker film is "a disaster," "no good" (237, 240), suitable only for the museum rather than for the market. Chaplin similarly recanted the political idealism of *The Great Dictator*'s parodic slapstick comedy later in life in his autobiography, writing, "[h]ad I known of the actual horrors of the German concentration camps, I could not have made *The Great Dictator*; I could not have made fun of the homicidal insanity of the Nazis" (392), a statement that Moll alludes to after viewing Chaplin's film in *Running Dog* (61). Yet through the formal experimentation with which he presents these films in text, DeLillo situates them as anchoring points in a revisionary media history, within which film stock and novelistic pages persist as technologies capable of revising and reconfiguring one another through material and aesthetic experimentation. To adopt Deleuze's language, this strategy offers a vision of the life or the afterlife of writing in the face of the saturation of visual media.

In these passages, DeLillo attempts to reclaim and refigure the novel's aesthetic power and critical purchase amidst the rising saturation of contemporary electronic media, not by way of defending or critiquing celluloid film, but rather by imaginatively reconfiguring its preexisting material elements and operations on the page. In doing so, moreover, he makes visible both the novel's own formal stratigraphic layering and its position within the larger stratigraphy of the media technology of the last quarter of the twentieth century. In attempting to turn over the cinematic image through textual means, DeLillo turns over the image of text as well.

**Writing Between the Intergeneric and the Intermedia:
Kevin Young's *To Repel Ghosts* and the Analog Aesthetics of the Turntable**

Only when gramophonic reproduction breaks down are its objects transformed. Or else one removes the records and lets the spring run out in the dark.

—Theodor Adorno, “The Curves of the Needle”

Write not like remembering, but the forgetting. This does not mean writing erasures, which has been done (but not, unfortunately, to death). Do not write like the *Erased DeKooning Drawing* by Robert Rauschenberg, brilliant as it is; do not write like the once beautiful thing, ancestral, now gone. Instead, write like DeKooning picking not the ugliest of his drawings for the kid with the good idea to erase, but instead picking a really nice one: write like something you don't mean to be erased but one day know will; then let them try.

—Kevin Young, “Deadism”

The turntable is a technology of paradox and internal contradiction. Under the aegis of poststructuralism, this claim could perhaps be made on behalf of any and all writing systems, and indeed of all writing, as traces (and systems for the production of such traces) that exist to record a presence that is no longer present.⁵³ Yet as universal as this condition is, the turntable manifests it in a particularly dramatic fashion. As Alexander Weheliye notes, “[f]ollowing Derrida's formulation of writing in the general sense, the phonograph appears to unearth the iterability of speech by abstracting oral communication (or human sounds in general) from its scene of (re)creation beyond the death of the addressee” (30).⁵⁴ This dramatic unearthing, phonography's simultaneous consolidation and fragmentation of the act of writing, takes place both within the turntable's mechanics and through its trajectory across the media history of the twentieth century. The turntable was originally built as a two-way technology capable of

⁵³ Kittler reverses the terms of this dynamic in *Gramophone, Film, Typewriter*, theorizing media technology as the defining precondition of all writing in a characteristically exaggerated fashion: “[A]ll concepts of trace, up to and including Derrida's grammatological *ur*-writing, are based on Edison's simple idea. The trace preceding all writing, the trace of pure difference still open between reading and writing, is simply a gramophone needle” (33).

⁵⁴ See Weheliye 30-36 for a useful overview of phonographic inscription in relation to Derridean conceptions of writing.

inscription as well as playback, allowing users to record sounds as well as to listen to them. Indeed, the mythology of the turntable relies on a seminal scene of such inscription, with Thomas Edison screaming into the mouthpiece of the prototypical phonograph (just as, of course, every individual moment of playback must also rely on its own corresponding moment of inscription).⁵⁵ Yet as central as this moment of two-way origin is to the discourse of the turntable as a philosophical object, equally invested in “writing and reading, storing and scanning, recording and replaying” (Kittler 33), the phonograph’s capabilities as a device for both writing and recording were relatively short-lived within the public market. The machine quickly traversed what Theodor Adorno describes as “the transition from artisanal to industrial production” (“Curves” 48), and has predominantly served as a playback device over most of its market history.⁵⁶ With the phonograph effectively stripped of the capacity for inscription, the opacity of the vinyl record that the machine serves (only) to play takes on a strange sort of cordoned-off mysticism. Like a trace in and of itself, the black surface of the disc stands in for the black box of the process of recording and pressing.⁵⁷ Its visual opacity signifies for the semantic opacity of the information etched in its grooves, unable to be extracted other than by the technology of the phonograph needle.

The turntable’s claim on the reproduction of the real flows similarly into a state of paradox over the trajectory of its history. The phonograph provides the means to make

⁵⁵ See Kittler 21 and Millard 24 for two recountings of this seminal moment.

⁵⁶ Chapter 2 of Millard traces the machine’s transformation from its inception as a two-way business technology in 1878 to its ascendancy as a home entertainment device by the late 1890s.

⁵⁷ Thus what were initially two intricately conjoined processes are split in their historical end, a transformation that ultimately defines the turntable as a technology that retains the vestigial memory of its own initial authoring capacities: while Kittler’s assertion that “[i]n the phonographic realm of the dead, spirits are always present” (72) through the preservation of sonic information is marked by the tendency towards hyperbole and the occult that defines much of his thought, perhaps the truth of his claim rests in the fact that the turntable’s most prominent spirit is the ghost of its own original form as a two-way technology.

sound “immortal,” as Edison described it (qtd. in Kittler 21), serving as the first storage mechanism in history that contains the materiality of enacted information through sound. Evan Eisenberg notes that “[t]he word ‘record’ is misleading” (109) because most recordings are composites and constructions rather than unmediated captures, but this path of etymological and informational confusion points in the opposite direction as well, back towards the phonograph’s initial capability to produce something more faithful than earlier technologies to the event being captured (as opposed to less faithful than some idealized conception of recording). In this second sense, the word “record” seems too generalized to do justice to the information storage capabilities of the vinyl disc that it refers to: whereas written, oral, and graphic accounts of a given event provide a “record” in the general sense of the term, the vinyl record has the potential to contain a more complex and comprehensive information capture, something closer to a sonic reproduction. Yet in making possible the comprehensive capture that constituted the “immortality” of sound, the phonograph also necessarily opened itself to the seemingly unwanted capture of noise. Viewed from the progressivist position of mass-market technocracy, in which every new technology is by definition faster, more precise, more accurate, and above all somehow simply “better” than that which preceded it, the tension between unwanted noise and a more comprehensive immortality that emerged from the moment of the phonograph’s invention was a necessary evil for the greater good of technological progress. From Kittler’s perspective, this “waste or residue . . . the physiological accidents and stochastic disorder of bodies” (15-16) has precisely the opposite valence, marking an irreducible and indeed intrinsic contamination within the attempted capture of the real, and serving as the rule of sonic writing rather than a

bothersome, temporary exception. Whatever one makes of this tension in philosophical and ideological terms, by the end of the twentieth century, the proportion of signal to noise within the phonograph had seemingly been dramatically reversed when viewed against the surrounding technological landscape. Indeed, what defines the turntable in contrast to digital sonic technologies such as the compact disc and the mp3 file format is not its sonic resolution, as it were, but rather the amount of noise it retains. Such a shifting position is indeed embedded within any device, and becomes visible against any technological change. As Adorno suggests, “[t]he moment one attempts to improve . . . technologies through an emphasis on concrete fidelity, the exactness one has ascribed to them is exposed as an illusion by the very technology itself” (“Curves” 48). Thus as writing is to the phonograph in Kittler’s analysis, so is the phonograph to digital sound within such a technohistorical framework; viewed against technocultural change over time, it seems not only irrelevant, but moreover at once paradoxically both stripped of and overwhelmed by its own defining, once-unique technological capabilities.⁵⁸

Thus the turntable has both become outmoded and, more importantly, dramatically circumscribed with regard to the space of its meaning production as a result of the pressure on (as well as the pressure of) its defining characteristics. Given these changes, the question of what a critical consideration of the device might contribute to media history and cultural history becomes particularly complex. Weheliye offers one

⁵⁸ Weheliye describes Kittler’s attention to the phonograph’s expanded capacity for “register[ing] acoustic events as such” (Kittler 23) as “[a] striking assertion, no doubt, one that simultaneously gets to the heart of the matter and completely misses the point, as anyone who has heard early sound recordings (think about the lack of lower frequencies on many old recordings, especially those of the acoustic era) or some current mp3s will realize” (33-34). Weheliye rightfully points out Kittler’s blind spot in smoothing over the limitations of the early phonograph in attempting to think its new capacities. However, he himself overemphasizes these limitations as media-historical signposts. I would underscore in response the importance of remembering that the “quality” of all (sonic) technologies always needs to be judged contextually and hesitantly: sound “as such,” whether on an LP or an mp3, is never an absolute quality but rather always contingent, relative to the capabilities of both past and future technologies.

rationale founded on a critique of the racial power structures that shape the discourse of technological progress: parsing the relationship between what Samuel R. Delany identifies as “the white boxes of computer technology” and “the black boxes of modern street technology,” Weheliye argues that “[t]he former, particularly in the form of the Internet and World Wide Web, are deemed central to the vanguard of a continually progressing machine, while the latter—sound technologies for instance—are not regarded as technological at all” (2). The distinction to which Weheliye draws attention is as prescriptive as it is descriptive, imposing cultural difference in a manner described by Alicia Headlam Hines, Alondra Nelson, and Thuy Linh N. Tu in their essay “Hidden Circuits,” which Weheliye takes as one point of departure:

[W]e find it necessary to use a broader understanding of technology, and to include not only those thought to create revolutions (e.g., information technologies), but also those with which people come in contact in their daily lives. For when we limit discussions about technology simply to computer hardware and software, we see only a “digital divide” that leaves people of color behind. (5)

I suggested in Chapter One of this dissertation that attending to the lost technology of the typewriter similarly provided a particular kind of critical purchase on the blind spots of media technology, media history, and their relation to print literary production. I showed how Warhol’s *a*, by materializing the mechanics of the typewriter on the page through literary form, offers both a representation of the self-confounding, explosively dispersed nature of those mechanics and a prospective vision of how they might underlie all

contemporary textual production to varying extents, both in spite of and because of the ways in which that production has moved beyond the era of the typewriter.

The turntable and the record constitute a similarly lost technological system in many ways. Just as the typewriter has been superseded by the digital technology of the computer, so has the turntable by the compact disc and the mp3 (as well as by a number of other technologies—8-track tape, cassette tape, digital audio tape—which are themselves now also lost). Like the typewriter, the turntable circulates somewhere between the dustbin of history and the rarefied sphere of the retro—the preference that vinyl enthusiasts show for the professed authenticity and warmth of the LP registers the same nostalgic impulses that the Typing Explosion's pastiche of postwar office culture plays upon. Indeed, just as my earlier analysis of the typewriter made an argument for reading the irregularities and contingencies of media technologies from the grounding mechanics of the machine upwards as a way of destabilizing conceptions of media history as stable and linear, the turntable provides a point of entry for a similarly localized consideration of the uneven and discontinuous ways in which literary writing and media technology transform and represent one another. Considering the formal mechanics of the turntable and the records that it plays makes possible a critical perspective on literary writing and the media history of the twentieth century that is deeply bound up in and shaped by issues of inscription and playback, authenticity and noise, which manifest themselves at the level of structural operation as well as at the level of thematics. The turntable provides a specific instance of the ways in which certain defining dimensions of aesthetic production and consumption—writing and reading, legibility and opacity, continuity and segmentation—exist in a constant state of inversion

and interchange determined by the material constraints of the media technology in which they reside. The particularities of the turntable, as Weheliye suggests, point towards considering technology and the condition of writing in dialogue with technology across a broader racial and cultural landscape than they are conventionally seen as inhabiting, dismantling what he describes as the “bifurcation [that] locates black cultural production beyond the pale of what counts as technological in contemporary critical discourse” (2). In this sense, my focus on the turntable within a project on print literature and media technology is an attempt to extend his thinking by considering the ways in which sonic technology in general and the turntable in particular as African-American cultural domains inform another instance of literary production, in this case Kevin Young’s *To Repel Ghosts: Five Sides in B Minor* (2001), a print text structured as a collection of records and focused in part around the life and work of the contemporary African-American painter Jean-Michel Basquiat.

Young describes *To Repel Ghosts* as an “extended riff” on Basquiat rather than a straightforward biography, with the artist as his work serving as “a bass line, a rhythm section, a melody from which the poems improvise” (345). The text interweaves poems detailing Basquiat’s early life, his sudden rise to fame in the art world of 1980s New York, and his death from a heroin overdose in 1988, with ekphrastic descriptions of his artwork and a number of poems concerning and at times directly addressing African-American cultural figures such as Jack Johnson, Charlie Parker, Bert Williams, Langston Hughes, and Billie Holiday, many (but not all) of whom figured prominently in Basquiat’s paintings. In many of the poems in *To Repel Ghosts*, Young incorporates writing from Basquiat’s highly textual paintings, distinguishing it from his own writing

by setting it in small capitals similar to the lettering that Basquiat himself used. Although *To Repel Ghosts* resembles any other conventional print text as a physical object, Young divides its pages through the elaborate conceit of its being a collection of vinyl sides. Rather than apportioning it into sections, subsections, and poems, he structures it as two discs, entitled “Zydeco” and “Mojo,” each one divided into several sides: “Zydeco” includes the sides “Bootlegs,” “Hits,” and “Takes,” and “Mojo” includes “B-Sides” and “Solos.” The number of tracks on any given side varies from seventeen to thirty, and their page counts vary from fifty-five to almost eighty. Weheliye claims in relation to Ralph Ellison’s preface to *Invisible Man* (a key intertext for *To Repel Ghosts*, which I address in greater depth towards the end of my discussion) that “a subject of sonic Afro-modernity, while breaking with purely visual and linguistic paradigms of subjectivity, comes into being in the crevice made by the audiovisual disjunction engendered by the phonograph” (70). Ellison’s preface centers on its protagonist’s psychic transportation by means of listening to a Louis Armstrong record. Through *To Repel Ghosts*’ experimental, intermedia form, Young extrapolates this approach one step further, presenting the text as records rather than using an encounter with the record as a point of entry into a narrative world. Indeed, *To Repel Ghosts*’ titular “five sides” even seem in part to respond to the technophilic wish of Ellison’s protagonist: “Now I have one radio-phonograph; I plan to have five. . . . I’d like to hear five recordings of Louis Armstrong playing and singing ‘What Did I Do to Be so Black and Blue’—all at the same time” (7-8).

In selecting Young’s text as a site of inquiry for this chapter, then, I also aim to bring the terms of Weheliye’s argument into dialogue with the concerns of my own project. By considering *To Repel Ghosts* alongside the material and technological

properties of the turntable and the LP record, I will consider the implications of this sonic technology for the textual aesthetics and politics of print literature both within and outside of the domain of African-American cultural production that Weheliye focuses on. Indeed, the “audiovisual disjunction” Young’s work traces includes not only the “crevice” between visual and linguistic (that is, visible and audible) articulations of subjectivity made possible by recorded sound but also the uneven and unstable relationship between the record as itself a sonic object and the textual objects that often accompany it and circulate around it. In keeping material objecthood at the center of a critical reconsideration of the turntable and the record, my approach follows from Adorno’s focus on “the contours of [the record’s] thingness” in his 1934 essay “The Form of the Phonograph Record:” “it is not in the play of the gramophone as a surrogate for music but rather in the phonograph record as a thing that its potential significance—and also its aesthetic significance—resides” (58). While I agree with Weheliye’s claim that “the interface of [sound recording and reproduction and twentieth-century black cultural production] provides a singular mode of (black) modernity” (3), and indeed derive many of my working principles here from this insight, I will also show how the generic experimentation of Young’s text also conceptualizes the larger system in which these relations take part; in tracing a terrain of multiple formal, material, and aesthetic crevices, *To Repel Ghosts* asks to be read in a manner that points towards how we might read those crevices (and the place of media technology within and across them) more generally. Young reimagines the “interface” that Weheliye describes in a multipart, fractal configuration, in which the material conditions of print textuality, the discourse of black modernity, and the media technology of the turntable collectively represent, invoke,

produce, and recycle each other's constitutive elements. The media system that Young imagines through the turntable in *To Repel Ghosts* is a system of informational and aesthetic appropriations and overlaps, processes that the turntable itself both represents and enacts.

Analog and Apparatus, or, Ceci n'est pas une disque: Generic Experimentation as Media Theory

These overlaps have a long cultural and material genealogy that the text invokes and enters into through both the governing conceit of its being a collection of records and the material textual apparatus that rehearses this conceit. Thus before I turn in earnest to the poetic "tracks" that make up the bulk of *To Repel Ghosts*' pages, I spend considerable time and space on a number of elements in its material apparatus: its prefatory poem, its frontispiece, and the pages that demarcate its various recorded "sides"—all entities that fall under Gérard Genette's conception of the paratext, the material "zone of transaction" that "enabl[es] a text to become a book" (1). As Beth A. McCoy argues in her reading of paratextuality within the African-American literary tradition, the spaces that comprise any given paratext are overlaid by multiple opposing vectors of cultural and racial power: "the paratext is territory important, fraught, and contested," "tangled throughout books . . . a zone transacting ever-changing modes of white domination and of resistance to that domination" (156). McCoy makes clear that the "contested" status of the paratext is particularly urgent within the context of the increasingly complicated and multiple mediations of contemporary culture, a proliferation of forms that encompasses what D. F. McKenzie describes as "everything in fact from epigraphy to the latest forms of

discography” (13)—a comprehensive categorization that uncannily (if accidentally) encapsulates *To Repel Ghosts*’ paratextual and mediological scope. For Young, the proliferating paratextual material of his text offers a way of dually transacting cultural power and media structures. To modify Genette’s definition, the paratext of *To Repel Ghosts* enables its text to become a record—or at least to purport to do so in a manner that derives considerable discursive and political energy from its being negotiated extremely closely and complexly along media-technological lines. Indeed, in producing a book that explicitly presents itself as something other than a book and, more specifically and more importantly, as an artifact of sonic technology, information from another medium, Young stakes out a critical project at the intersection of media technology and African-American literary culture. These sides constitute a particularly, deliberately mediated instance of the “talking book” that Henry Louis Gates, Jr. cites as a founding object in the African-American literary canon (127 ff.). Weheliye understands the Gatesian “speakerly texts” of this tradition that follow from the shaping gesture of the talking book as “sound recordings . . . writings [that] suggest a different way of merging the *phonê* and *graph* than the technology of the phonograph, underscoring how sound and writing meet and inform each other in the annals of twentieth-century African American literature” (39). Young’s text short-circuits this merger, imagining a literalization of the talking book, a text that actually produces sound. Yet it also redoubles and reworks the terms of this merger. It shares the same concern with the intersection and interdependence of sound and writing—and indeed extends this concern—yet it does so not through “speakerly” “writings” but rather through writings that purport to be the components of a series of phonograph records—“playerly records,” as it were, that

demand that the phonograph be confronted directly and specifically as a discursive object rather than sidestepped or absorbed into a more generalized domain of textuality.

Of course, the centrality of this strategy to the text's media-theoretical project should hardly come as a surprise if we take its subtitle—*Five Sides in B Minor*—at its word: this designation makes the claim that *To Repel Ghosts* is not a series of poems at all, but rather a collection of “sides,” groupings of recorded sonic tracks.⁵⁹ The conceit of the print text as a sonic artifact pervades its paratextual apparatus within both real and imagined domains—indeed, with regard to the text's media-theoretical claims, its paratextual gestures seem almost to counterbalance its extensive, 340-page “main text.” In addition to its being divided into sides demarcated by visual images of the surface of a record (which I discuss in greater depth below), the text includes a set of “liner notes” (345-347) as well as an acknowledgements page that details the text's production and publication history in sonic terms, describing it as an “album” and an “LP,” noting where it was “[r]ecorded” and “[r]e-mixed,” and prefacing lists of previous publications of various tracks with descriptions such as “[s]ingles from this album first aired on the following stations:” and “[o]ther cuts have since appeared on compilations including:” (348). These formulations imagine a relationship to the paratextual that exists past the point of transparent recognition; for Young, using the form of the record as a model is not an authorizing or authenticating strategy but rather one that both allows and forces the

⁵⁹ In addition to setting forth an announcement of the novel's overarching conceit of phonographic mediation, this subtitle resonates with a number of interrelated references and thematic echoes: Basquiat—whom Young often refers to as “B” within the text—as a connective character or “key” in the novel's ongoing riff, the alignment of Basquiat and African-American culture in general with a “minor” discourse, the blackness of minor keys on the piano keyboard, and perhaps even the marking of b minor as a “black key” in affective terms (see Tusa 2 for a discussion of Beethoven's application of this last description).

text to engage in a range of dissonant recognitions with other media forms as the result of its uneven interface with multiple generative forces and structures.

In using the conceit of recorded music as a structuring concept for *To Repel Ghosts*, Young gestures towards Langston Hughes' *ASK YOUR MAMA: 12 Moods for Jazz* (1961). As its subtitle suggests, *ASK YOUR MAMA* consists of twelve distinct tracks, each of which consists of all-capital poetic verse alongside italicized directions for musical accompaniment, embedding within the text of the page a simultaneity that cuts across the forms of the print lyric and sonic performance. A set of "Liner Notes For the Poetically Unhep" (84) appears at the end of the text, providing "sardonic political glosses of each 'mood'" that "highlight the intermediate space between learned and vernacular Hughes occupies as a black poet" (Scanlon 50), as well as triangulating the interface among poetics, music, and politics that the poems themselves occupy and delineate. In the dissonant relation of these paratextual elements, *ASK YOUR MAMA* constellates a formal and technological interface of its own: its italicized directions position it as a score—a print text to be performed and interpreted—whereas its liner notes position it as a recorded object, the storage of a particular textual performance in time.⁶⁰ Larry Scanlon notes of *ASK YOUR MAMA* that

Hughes grounded his own poetic practices in African-American musical traditions, and, as his title itself indicates, in this poem he understands those traditions through the model of the Dozens, an oral linguistic practice of ritualized insult. What unites these vernacular modes for Hughes is the peculiar temporality

⁶⁰ Brent Edwards sees this unresolved multiplicity as characteristic of Hughes' blues poems as a group: "There is a problem . . . of two divergent mediums, two kinds of matter: the musical form of the blues, which is generally linked to the medium of sound, is . . . articulated in the form of a poem in written language" ("Window of Form" 595).

they derive from loss. . . . [T]he durability of the vernacular lies precisely in its incompleteness, and . . . this incompleteness gives the vernacular the syncretic power to appropriate and redefine other traditions, dominant or otherwise. (46-47)

The syncretism and appropriative power of Young's text emerges from a more emphatically materialized and mediated incompleteness, in the form of distortion at the multipart interface of print textuality, African-American modernity, and media technology that Weheliye describes. If Hughes' text insists on the materiality of T. S. Eliot's "claim of historical paralysis," "embodied in the paralytic state of race relations" (Scanlon 51), *To Repel Ghosts* extends this insistence, in addition extending Hughes' insistence on the "political materiality of poetic form, and in the formal materiality of cultural expression more generally" (51) by introducing the object of the record into the configuration more explicitly and extensively.

In placing the dynamics between literary production, cultural politics, and technological operations constantly and explicitly in play, the conceit of Young's record text also stages a dialogue with the Euroamerican tradition of modern and postmodern experimental poetry, echoing the work of predecessors including John Cage and the poets of the OuLiPo. Brian McHale suggests an intrinsically technological dimension to poetic structure overall, asking, "[w]hat, after all, is a fixed form . . . if not a kind of miniature machine for generating poems? . . . [W]hat is language itself if not a sort of machine with which the poet collaborates," and quoting Espen Aarseth's implication that "any author, in using the techniques and genres of his or her trade" might be inherently cyborgic (*Obligation* 254). However true these overarching claims might be at a generalized level, the notion of all poetics as (presumably equally) technological and all authorship as

(presumably equally) cyborgic functions to smooth over the specificity and complexity of Young's engagement with the material dimensions of sound stored on records.

Advancing an intricate model of intermedia writing, Young's work in *To Repel Ghosts* extends and complicates these claims through the depth of the reflexivity and media-theoretical perspective that he derives from the conceit of the record. Given *To Repel Ghosts*' postmillennial publication date, its emphasis on the record seems as anachronistic as it is historically accurate—what place, after all, does a collection of poems posing as a series of vinyl sides have in the digital culture of the contemporary moment? Yet Young's reliance on the record as a governing conceit is neither a nostalgic gesture nor an outwardly resistant or defiant one. On the contrary, it serves as both a means of remaining historically faithful to the media technology of Basquiat's time and a larger claim about the aesthetic and material stakes of mediation and media history, staged in direct (if implicit) response to the ideology of constantly fluid, liquefying digitization that surrounds contemporary media culture. The text's self-reflexive inquiry into intergeneric and intermedia compatibility as established by its foregrounding of the record as an aesthetic form is inextricable from an inquiry into the analog condition embedded in the LP itself: taken together as analogues for one another, the media technology of the record and the literary form of *To Repel Ghosts* foreground the larger role of the analog as a distinctive trait of the text, its integration of the record, and its claims about media technology more generally. In a number of the structural and formal specificities of *To Repel Ghosts* (which I trace below), Young appropriates the generic procedures and structures of the record while simultaneously distorting and overturning them. This gesture in and of itself stages a strong argument on behalf of the inexactitude

of the analog as a pervasive and irreducible dimension of meaning production—precisely in modeling the text in the image of a series of records and a series of Basquiat’s paintings, Young explicitly claims the impossibility of completing such a gesture faithfully. The distortions that *To Repel Ghosts* both announces and performs underscore that every reproduction under such a system inevitably points back to and contains distortion, decay, reduction, and exaggeration of the original master material, inaccuracies and reverberations that are the defining points of both convergence and variance for the media forms in question.

What does it mean more specifically, then, to structure a printed text in the form of a record? One way to understand such a gesture might be as a particularly complexly mediated instance of what Joseph Conte describes as the “procedural form” of postmodern poetics:

procedural form consists of predetermined and arbitrary constraints that are relied upon to generate the context and direction of the poem during composition. . . . [It] presents itself as an alternative to the well-made, metaphorical lyric. . . . [T]he procedural form assumes as its first rule and intention that the formal choices that precede composition actually generate that process of composition. The formal intent is not to prepackage ideas or feelings for subsequent disposition; rather, the procedural form is radically exploratory. Such forms are not auxiliary to content, but primary to the creative process. (3, 40-41)

Young’s procedural conceit of “sides” as a formal constraint to structure and generate the content of *To Repel Ghosts*—his attempt to write, as it were, in the shape of records—resonates against Adorno’s description of the ways in which the physics of the record

resembles the shape of writing: “the possibility of inscribing music without it ever having sounded has simultaneously reified it in an even more inhuman manner and also brought it mysteriously closer to the character of writing and language” (“Form” 60). For Young, it is precisely the fantastical, unplayed and unsounded quality of the “records” comprising *To Repel Ghosts* that makes them viable objects for writing; in this sense, the structural apparatus of the text operates as at once both speculative and documentary, both phonographic and literary.

Just as Conte emphasizes the “radically exploratory” dimensions of procedural form in opposition to a simple potential for “prepackag[ing]” ideas, Young’s use of record form as a generative force is itself highly complex and contradictory. In the same way that the book’s paratextual elements such as the divisions between its sides, its liner notes, and its frontispiece accumulate and circulate around its so-called main text without articulating any clear narrative cohesion—indeed, they block this narrativity with the materiality of the record as an object—so too do its tracks themselves. Their subjects include events from Basquiat’s life and representations of his paintings as well as thematics and historical material that resist cohesion in being only indirectly related to him. These “non-Basquiat tracks,” so to speak, frustrate the narrative coherence that the text’s ostensible biographical subject seems to promise—tracks such as “Jack Johnson,” a 22-page, multi-section monologue in the voice of the titular African-American boxer, for example, or “Oleo,” a compressed portrait of the performer Bert Williams, represent material wholly outside of Basquiat’s life and related to his work indirectly and nonlinearly. The track “Monarchs” exemplifies the text’s overall anti-narrativity on a microscopic level. As the section I quote below illustrates, “Monarchs” consists entirely

of excerpts from the lineups of the Kansas City Monarchs, “*Kansas City’s Own/ World Colored Champions*” (25) of baseball, as the track’s subtitle notes, from various years ranging from 1920 to 1945:

1920

Arumi	rf, 2b	
Blukoi, Frank	2b	Philippines
Carr, George (“Tank”)	1b, rf	California

(25)

Although these tracks exist together in the same book with one another and with the tracks that focus directly on Basquiat, and often share common concerns, they are emphatically not detours, digressions, or deviations from a singular central or main path of the Basquiat life narrative. Indeed, while many of the figures addressed in these tracks—Johnson, Williams, and the Monarchs among others in the text—are the subjects of Basquiat paintings (although not necessarily the paintings rendered in *To Repel Ghosts*), the lines of filiation between these multiple spheres are never spelled out or even directly articulated. On the contrary, they relate paratactically, through a complex analogical commensurability rather than through direct, one-to-one connection or continuity.

In this sense, the book uses the structure of the record as an organizing principle, but also uses the conventions of the record and the print literary text to trouble and reconsider one another. To a certain extent, the discontinuity of *To Repel Ghosts* echoes and derives from Hughes’ similar approach in *ASK YOUR MAMA*. Scanlon notes that Hughes’ poem

does not move from mood to mood in any easily discernible narrative sequence.

Indeed, one advantage of this experimental form is that it allows Hughes to

explore the stasis of race relations without positing some historical teleology that would belie the catastrophic severity of that stasis. With each new mood, we return once more to the poem's premise, and, like melodic themes or chord progressions in a piece of music, the poem's tropes achieve their fullness of meaning not from a continuous narrative development, but through continual repetition. (51-52)

Yet as much as the similarly non-narrative repetitions and returns of figures within *To Repel Ghosts* invoke “melodic themes or chord progressions in a piece of music,” they also invoke the materially embedded discontinuities of the record as a storage mechanism for that music—hence Young’s use of “sides” rather than “moods” as the operative organizing unit. *To Repel Ghosts* juxtaposes moments that exist within a biographical trajectory against isolated, one-time historical events and documents without explanation or connection, and in large part seemingly without any larger integrating rationale. Faced with this archival mass of text, the reader must choose (although in reality he or she can ultimately only vacillate) between attempting to read linearly, in the front-to-back, beginning-to-end manner of a print literary text, and attempting to read randomly and isotropically, in a manner that approaches the book as a material collection of textual information without any larger organizing principle. This problematic of consumption echoes that of the record. Although the record’s tracks exist in a sequence, that sequence need not bear or impose any intrinsic meaning; the forward motion of the needle through the single ongoing groove of a record tantalizingly suggests a narrative coherence that can easily be undone through the selection of a single track from the given order. Both *To Repel Ghosts* and the sonic technology whose form it appropriates simultaneously invite

and dismantle a narrative approach to consumption, making visible the limitations of that approach through the same structures that encourage it. In this sense, the “sides” of the text’s title refer not only to phonographic units but also to a sheer multiplicity of signification, simultaneous renditions of a cultural-technological matrix that coexist without adding up in a stable or linear manner.

Just as Young uses the form of the record to interrogate narrative textual reading, the form of the book conversely puts pressure on the givens of the record as a material form. The material content of each side refuses clear correlation with the material dimensions of an actual recorded side: the number of tracks varies from seventeen on the shortest side to thirty on the longest, and the page count varies from fifty-five to almost eighty. Young’s organization raises a number of questions as to how written text might analogize the generic procedures and material dimensions of the record—how much time does the “playback” of a page take? How (if at all) do variables such as line length affect that time? How many poetic tracks could the physical space and information capacity of a record side hold? Moreover, beyond the generalized questions of how a printed book might procedurally appropriate the constraints of a record, the particular sequence of sides Young constructs contains disparities in dimension and scope (the differences in side length, for example) that would be effectively impossible to attain in the pressing of an analog record. Indeed, as emphatically as *To Repel Ghosts* announces the record form as its procedural conceit, there seems to be virtually nothing of the record about it other than the highly contingent concept itself; what appears to be a complexly evolved procedural form is ultimately the disjunctive effect of addressing another mode of meaning production at a close material level. By imposing the surface impression of the

vinyl record onto the structure of *To Repel Ghosts* while simultaneously transgressing its determinant constraints, Young tests the analogic limits of written text, raising into relief the ways in which the generic and physical dimensions of a record (its duration, segmentation, and bandwidth, among others) can be broken, broken down, reconstituted, and otherwise transformed through outside influence and reinterpretation from another media form. Thus just as Young structurally transforms and radicalizes his literary work through sonic, technological “constraints . . . formulated without literary precedent,” producing a textual aesthetics that is “obviously made, deliberately assembled” in the image of the record (Conte 43), he conversely interrogates the material structure of the record as a medium for storing information through textual representation.

The media-theoretical project of *To Repel Ghosts*’ complex, chaotic structural schema becomes more fully clear in the context of Young’s 2005 publication of *To Repel Ghosts: The Remix*. Young describes this shortened version of the 2001 publication as “a more danceable remix version” of “the masters” that constitute the version of the text that is the focus of my discussion in this chapter (*Remix* iii).⁶¹ As with the role of the individual tracks themselves on the microscopic level in the 2001 version (or the 2005 version, for that matter), the larger relationship of this remix to the 2001 version frustrates the idea of a causal, sequential narrative of creation and circulation. In the preface to the remix, Young claims that he produced it while waiting to find a publisher (“airplay” [iii], as he terms it) for the longer version, and then chose to release the remix after publishing the longer version “precisely because it had its origins in an earlier

⁶¹ In his discussion of this version in a note preceding its text, Young intimates the possibility of still other extant versions: his full reference is to “a more danceable remix version *like the one here*,” and he describes this remix version as being “much as [he] first recorded it” (iii, emphasis added), although seemingly not exactly so, suggesting a multiplicity of different “ones.”

moment, and not in hindsight” (iii). Yet if the remix “should not be considered an afterthought, or replacement” (iii), neither is it exactly a precursor or a documentation of a work in progress before completion of a finished product, but rather exists somewhere caught in the disjunctures outside of both of these temporal possibilities. In this sense, the “re-” of the remix, suggesting post facto revision, seems almost inappropriate in this case (in its paring down of the number of tracks it contains, this remix also runs contrary to the conventional connotation of remixing as an extension that elongates sonic themes and moods in order to make a composition more “danceable”). In the terms of my discussion above, the text relates to the 2001 version more as a paramix, an ancillary collection circulating around the master collection, connected integrally but opaquely and indirectly—in Young’s words, as “an alternate take that’s still the same song” (iii).

In keeping with these temporal disjunctures, the relation of the remix’s content to that of the double album is also multiply contradictory. At first glance, the greater danceability of this alternate take seems to come from its being more thematically and structurally streamlined. In constructing the text as only one two-sided record rather than five sides, Young utilizes one less taxonomic level (only sides and tracks here instead of discs, sides, and tracks). Additionally, he breaks this new schema into titled sections coded as literary and thematic rather than as phonographic. Instead of sides labeled “Bootlegs,” “Hits,” “Takes,” and so on, these thematic sections function as the predominant unit of organization: for example, “Portrait of the Artist as a Young Derelict,” which is the title of a poem with multiple subunits towards the end of the 2001 version, is the title of the opening section of the remix, which includes tracks covering a number of Basquiat’s early works and experiences. “Jack Johnson,” a single long track

with multiple subunits in the 2001 version, is a section itself in the remix, divided into multiple tracks that correspond to the subunits of the 2001 version. “Famous Negro Athletes” collects a number of tracks about African-American athletes and Basquiat’s paintings about them from across multiple sides of the double album, including the track “Famous Negro Athletes” as well as “Monarchs,” “Muhammad Ali by Andy Warhol,” and “Cassius Clay by Basquiat.” Yet this new configuration is ultimately no more coherent or narrative in its organization, as any number of anomalies suggest: why, for example, does the section “Famous Negro Athletes” include a track entitled “Peruvian Maid, or, $\frac{3}{4}$ of Olympia Minus the Servant?” Why does this section *not* include “Jack Johnson,” Young’s most sustained consideration of a famous African-American athlete? Length provides perhaps part of the answer in this latter case, but not through any means directly articulated or explained in the text. This version of the text also has its own unique paratextual complications and confusions. The track “Negative” (which I discuss towards the end of this chapter) appears at the beginning of the first side outside of any of the text’s organizing sections, as a sort of standalone announcement of its concerns (yet a wholly different announcement from the 2001 version’s prefatory poem that I discuss below, which itself appears nowhere in the 2005 remix). That first side, moreover, is Side B—another reference to Basquiat, yet also a reversal of the spatialized order of the record. Thus if the remix is “an alternate take that’s still the same song,” it is the same precisely in being predicated on a disordering structure that is perhaps equivalent and analogous to that of the 2001 double album, but ultimately dramatically different in the particularities of the distortion in question. Its strange approximations of and divergences from both the specific structure of the 2001 version and the general structure of the

record as an object set the complexities and distortions present in the 2001 version into starker relief.

In using *To Repel Ghosts*' generic structure to frame multiple different media as contradictory and commensurate, Young establishes the inexactitude of the analog as a crucial concern at multiple levels. He announces his focus on the analog as a working principle in the short prefatory poem that is the text's first paratextual element and indeed the first piece of information inside the book, appearing before both its frontispiece and the page listing Young's other publications. This poem is untitled, and appears entirely in italic, lower-case characters:

*distortions clicks & pops
from analog equipment
are part of the fabric
& only contribute
to the garment's uniqueness
& sound quality (i)*

These six lines weave together multiple strands of closely related plays on words:

"sound" registers both in its sonic sense and as a marker of the stable, reliable "quality" of the "garment" in question, while "analog" connotes both a format for sonic technology and a larger mode of semantic, aesthetic, and informational relation. Similarly, Young's use of fabric and garment as key images in such a prefatory piece implicitly underscores the material textuality of the work to come, characterizing it as woven from both textual and technological fiber. The multiple resonances of these single words provide points of connection among different fields of meaning—the technological, the textile, the poetic—that are all conceptually and verbally interrelated, but are never completely interchangeable. As the self-reflexive place of "analog" as a central term within these relations suggests, these domains are themselves analogues, entities that are comparable

and share a conceptual overlap without being wholly reconcilable. Through the centrality of this term and concept to the poem, Young provides a version in miniature of the text's argument as a whole, synthesizing poetics and sonic technology as cultural domains that are not only both analogic in and of themselves but also, in this condition, analogues for one another.

Thus through these inexact comparisons, the poem encapsulates both the paradoxes of the turntable that I raised at the outset of this discussion and the paradoxes of intermedia writing and the aesthetics of information as embedded in print textuality. The accuracy and "distortion" that the poem articulates and performs become visible as co-constitutive properties of the turntable as "analog equipment," each one dialectically requiring, opposing, and producing the other. Similarly, the authenticity that the poem promises on behalf of the text as a whole is an explicitly and deliberately distorted authenticity, transformed and transmuted by external forces such as time and decay, but also by the way in which Young manipulates the discontinuous, non-narrative text as a seemingly faithful record of Basquiat's life, work, and times. There is no explicit mention of a record within the poem because there is no credible record in the sense of an unimpeachable fidelity, only a series of analog variations. This prefatory poem, then, at once both solidifies and subverts *To Repel Ghosts*' claim to be a series of records. Rather than standing as deviations from some sort of one-to-one replication of another media form—a digital copy, so to speak, of another kind of text—Young's simultaneous embrace and circumvention of the procedural conceits of the record form is a necessary, explicit claiming of the unachievability of precisely what the text purports to be. These gestures suggest that in order to write in the shape of records, it is necessary to do so in

categorical difference from the record, not as an indirect consequence of untranslatability between the two forms but rather as a productive means of accessing the aesthetic energy produced through such a dissonance. The distortion that emerges as a governing principle through this approach is not a necessary evil as in the eyes of technocorporate progressivism, but nor is it a wholly resistant gesture that undoes the controlling cultural work of that progressivism. Rather, as this prefatory poem itself argues, it is literally and figuratively part of the fabric of intermedia relations, an irremovable result of working across different systems of information production and storage.

A number of visual paratextual features within *To Repel Ghosts* extend its analogic approach to intermedia relations. The first of these within the text is a reproduction of Basquiat's "Now's the Time" (1985), a plywood disc nearly eight feet in diameter painted to resemble the Charlie Parker record of the same name. The surface of Basquiat's "record" is starkly minimal, its blackness interrupted only by two white rings to demarcate the outside of its label and its spindle hole and by text denoting the title and artist, "PRKR" in Basquiat's orthographically compressed, small-caps writing. His turn to the sculptural in this piece (a relatively rare instance in his work overall) accentuates the materiality of the record it represents, expanding its physical dimensions while reducing its semantic dimensions, replacing the record's regular, concentric phonographic groove with the organic irregularities of wood grain and compacting the explanatory text of its label. These gestures transform the Parker record into a monument to the opacity and distortion that information gathers as it moves across different media. Young's inclusion of this image on the frontispiece further extends Basquiat's transpositional visual play: the oversized, textured, three-dimensional artwork becomes a flat, textureless image

smaller than a human hand, and indeed smaller than any actual record. The full impact of this transformative frontispiece depends on a reader's prior knowledge of the original Basquiat work (as well as perhaps of the original Parker record). Yet the image as it is within the text, directly across from the text's title, subtitle, and attribution—these sides are “sung by the author” (v)⁶²—nonetheless conveys the virtual impossibility of putting work in other media transparently into or onto the printed page by announcing Young's attempt to engage in just such a project.

The pages that mark off and introduce the text's different sides throughout the book display a sequence of even more minimalist “records.” Each of these pages consists of a black circle with a small white circle at its center and white and gray text across it, enumerating the names and numbers of the disc, the side, and the various tracks included within it—for example, disc one is entitled “Zydeco,” and side one of disc one is entitled “Bootlegs” and comprises twenty-seven tracks, all listed on the image at the beginning of the side. These meta-Magrittean pages extend the work of the frontispiece more fully into the domain of the literary and the textual; even more so than that introductory image, they are and are not records, registering as blank, flat surfaces etched with textual, alphabetic information. They function as minimalist icons, at once both reproducing and distorting their imaginary counterparts in the real world of the vinyl LP, and also as visual analogues of the Basquiat painting on the frontispiece. Much as Young's incorporation of “Now's the Time” distorts Basquiat's distortion of the original Parker record by

⁶² This attribution, fluctuating somewhere between tautology and contradiction, also brings *To Repel Ghosts*' form into a closer paratextual dialogue with the genre of the slave narrative, in which frontispieces often performed the complex work of authentication and authorization (in all senses of the word) through deceptively literal attributions such as “written by himself.” Young's announcement of his novel as sung by the author locates it as written, played, and sung, a document that derives its authenticity from this distribution and the distribution of authorship that produces it. For a seminal example of the slave narrative frontispiece, see Douglass; for a discussion of appropriation of these genre conventions in another contemporary context, see McCoy 168n9.

transposing it into the domain of print textuality, these pages work towards a similar intermedia point from the opposite direction, distorting the conventional table of contents into the form of a record. The stark contrast of black and white space on these pages stages a complex play on scale and synecdoche. While the image seems at first to represent the black center label of a record with a white spindle hole in its center, it also demands to be read at a wider spatial scale, in which the black space represents the entirety of the record and the white space represents the central label on that record. This second reading of the disc image inverts the proportions and visual polarities of the first reading, a vertiginous optical gesture that announces the question of the text's form and content as constantly in flux.

This paradoxically minimalist *trompe-l'oeil* effect extends from the visual realm into the material and semantic realms. The track titles inscribed across the surface of these imagined LPs stage the similar spatial-semantic question of how they might relate as parts to the whole of, variously and simultaneously, a poem, a book, and a record. This question registers as a highly mediated and materially engaged instance of the worlds embedded within worlds that McHale cites as a central trope of postmodernist fiction, a sort of *disque-en-abyme*, so to speak.⁶³ Of course, a crucial difference persists between Young's structural conceit and the majority of the worlds within worlds of postmodernist fiction described by McHale. Whereas the structures discussed by McHale take place at the narrative level, within the ontological world of the novel (although they often violate the boundaries around this world through a self-conscious implication of an author figure), Young's records exist outside of the narrative, diegetic world of the text's content

⁶³ For a full discussion of McHale's application of *mise-en-abyme* to postmodernist fiction, see Chapter Eight, "Chinese-Box Worlds," in *Postmodernist Fiction*.

or “plot,” to the extent that there even is one. There is no direct material connection between Basquiat’s biographical world or the world of modern African-American history within the text and the world in which the discs that make up the text exist. These discs are imaginary artifacts rather than penetrations from a narrative world, produced by Young in relation and response to Basquiat as a cultural practitioner yet bearing no ontological attachment or connection to the world of Basquiat as a persona or character. The five sides that make up *To Repel Ghosts* are the text, yet somehow they are not of the text.⁶⁴ Conversely, these records are not records either: although I have used the term “record” thus far as a matter of descriptive convenience, that word does not appear anywhere in the text’s front matter or in the pages demarcating its various sections. Young establishes a multidimensional play on words through this deliberate omission: the record-like images dividing the different sections of *To Repel Ghosts* are images of something other than records, and just as there are effectively no records within the physical space of the book per se in the sense of vinyl LP discs, there is also no historical record within it, no possibility of an accurate material capture of Basquiat’s life and work or of the cultural network around him. Thus the “extended riff” improvised from Basquiat and his work that Young promises as opposed to a straightforward biography also stands in counterpoint with the (im)possibility of a technological means of comprehensive, totalizing documentation. Young’s text and the images that divide it serve to record this material, but they are emphatically not records. This tension finds its extreme in the ontological, technological, and cultural problem embedded in the “five sides” of its

⁶⁴ The material-narrative disjuncture of these imaginary phonographs resonates uncannily in its form with Weheliye’s description of the visual alterity of blackness: “a *lumen* of blackness, a veritable black hole around which meaning spirals in the cross-reflections of the surrounding mirrors, but which cannot be accessed itself” (49).

subtitle. This description makes perfect sense in the context of the language of jazz culture, connoting a collection of five recordings. Yet when read literally it takes on a koan-like impossibility—how can a collection of two-sided vinyl records ever have five sides? How can Disc One—or any disc, for that matter—have three sides? Young uses the structure of *To Repel Ghosts* to imagine recording through print textuality and, moreover, the recording of records, as a process that is intrinsically fractured and multiplied, simultaneously partial and excessive at the most fundamental level, a product of the overlapping, synonymous, and contestatory domains of artistic production, vernacular culture, and technological materiality that *To Repel Ghosts* draws upon.

In setting forth an imaginary collection of records consisting entirely of printed text, Young claims for writing the properties that Kittler attributes to the phonograph as a modern media technology. Kittler claims that modern printed text, its scope compressed to the finite options of the typewriter keyboard, pales in comparison to the complexity of the phonograph's "noise of the real:" "[e]verything that has been taken over by technological media since Edison's inventions disappears from typescripts" (14). For Young, the noise of claiming the properties of the record inheres not in claiming the greater bandwidth of sound per se but rather precisely in the act of pressing the structuring forces of print literature against those of the record, staging uneven connections and registering commonality alongside difference. However, this revision of the relations between the two media of writing and phonography is neither a critique of the technical superiority Kittler attributes to the record as a media technology nor an attempt to assert a counter-superiority on behalf of printed text. On the contrary, Young uses the conceit of the record to rethink the operating parameters of text in light of and in

the context of the record. I suggested in Chapter One that Warhol's approach to literary production in *a* threw into relief the dramatic, counterintuitive contingency produced by the typewriter's compression and isolation of textual information; in *To Repel Ghosts*, Young stages an inquiry into a question with the opposite vector, asking how print writing might take shape within the dispersed, opaque informational surface of a vinyl record. Again, however, although it is writing that puts pressure on the constraints of the record, Young's conceit of a "record book," as it were, does not privilege one side of this dynamic over the other. Precisely because *To Repel Ghosts* sets the contestation between these material forms in play, it is not an attack on or critique of either form or its material dimensions or constraints. On the contrary, in establishing generic constraints through imaginary technology only to sidestep them almost as if they were never there to begin with, Young establishes an initial discursive landscape defined by overflow within technologies as well as between them, a landscape defined moreover by the centrality of that overflow—a dense noise flowing across different forms and sites of information—as a constitutive force for each technology. In the sections that follow, I trace the ways in which *To Repel Ghosts* exposes and channels that overflow as a transformative force for writing.

Tracing Distortion: Analogs and Catalogs, Indexicality and Inexactitude

For Young, the acts of working across genres and thinking across media catalyze and sustain one another, each one containing distortions that define it in relation to the other through complex commensurability. The comparative difference—the distortion across forms—between the generic intervention of writing a book-length archive of poems and the medial intervention of writing a book-length archive of phonographic

sides is the crux of the text; these two projects constitute analogous interventions into the analog carried out over different, albeit closely connected, metric regions. Stretching across these regions, Young's poetic language itself models a practice of speculative intermedia dialogue embedded at the level of media forms and spiraling inward in scale to the level of the word. The deliberate polysemic overload of the lines in *To Repel Ghosts* serves to accumulate overlapping, uneven meanings within individual words in a manner that points to analogously overlapping and uneven relations between media technologies; in this sense, his style exaggerates poetic technique in order to position it as an analog for media production, a means of triangulating between literary writing, Basquiat's paintings, and phonographic records. By imagining intermedia relations as an integrally continuous field of meaning through this emphasis on universal and universalizing distortion, Young situates print writing firmly within the landscape of media technology rather than outside, above, or below it, no more or less commensurable with other information technologies than they are with one another.

Young's elaborate polysemia has particular implications for his consideration of the LP record as a material object, but it also appears in numerous other contexts across the tracks of the text. Thus before turning to the more explicitly phonographic moments in the text of *To Repel Ghosts*, and in preparation for a close consideration of those moments, I want to consider the broader effects of Young's registration of the aesthetics of the analogue as a working practice. The short track "Pork," which I quote in its entirety below, exemplifies this practice:

Ham, Sons of
 Ham hock
 Ham i.e. showoff (99)

“Pork” is literally and figuratively indexical, a condensed catalog of unarticulated resonances and contiguous meanings related to the titular term. The track’s terse language and discontinuous form suggest that there are complex, overlapping relations between the terms in play, but never make explicit what those relations are. Moreover, those relations themselves are always close but never synonymous, a tension raised in the way the indexical form of the track situates them: these multiple uses of “ham,” for example, are not semantically interchangeable; nor are pork and ham; nor even are ham and showoff, in spite of and because of their being linked by an equating “i.e.” Indeed, Young’s grouping of these uses under a single title serves to underscore differences in linguistic and cultural valence as much as similarity.

Just as these blankly stated meanings relate to one another through the complex dissonant convergence that characterizes the analog for Young, so does the track overall relate to Basquiat’s painting “Pork,” and, moreover, to Basquiat’s broader artistic practice as visible in this painting. Basquiat’s “Pork” is painted on a door: the main panel of the painting, occupying the lower two-thirds, is dominated by a black-skinned, red-eyed head topped with a bristling, undulating halo, a sort of dark, distorted angel. A variety of other marks circulate around this head, including the word “pork” itself, a painting of a cardboard box marked with the words “top” and “peso neto” (a frequently appearing phrase in Basquiat’s work), a series of repeated h’s—HHHH—and several patterns of curlicues and arrows that resemble fences. Above this main panel, the six panes in the original structure of the door contain multiple other marks: a pie shape with one slice missing; a smiling, almost cartoonish African-American head with a flattop haircut; repetitions of the letter R and of the word TAR (another common word in Basquiat’s

work). This painting bears an opaque relation to the titular term “pork” that is characteristic of Basquiat’s approach to textuality and source material in general; indeed, as with Young writing in his wake, Basquiat’s use of text is indexical in the literal as well as figurative senses. In a 1983 interview, curator Henry Geldzahler suggests to Basquiat that his inclination towards copying and listing words in his paintings produces “indexes to encyclopedias that don’t exist,” a Borgesian claim to which Basquiat responds obliquely, “I just like the names” (40); when Geldzahler characterizes Basquiat’s cultural syncretism as reflecting “an interest in all kinds of intellectual areas that go beyond the streets, and it’s the combination of the two,” Basquiat replies, “it’s more of a name-dropping thing” (42). Basquiat’s response here resonates in both vernacular and physical terms: his works engage in a practice of cultural and historical reference by literally dropping names and other words into space, allowing them to hang paratactically around one another on the canvas without invoking the clear referents (real or imaginary) implicit in Geldzahler’s mention of encyclopedias. To modify Gates’ terms, such paintings are talking canvases in their deployment of text, but they talk in a way that resembles the recitation and reference of reading rather than the annunciation of originary speech. Jeffrey Hoffeld suggests that this practice of inscription is at least partly shaped by Basquiat’s intensive study of a monograph by Leonardo da Vinci. Hoffeld claims that Basquiat appropriated not only the specific contents of the book but also several crucial elements of its aesthetics, both the “astonishing mix and range of subjects” juxtaposed on the page in its voluminous index and the “overallness of treatment” through which da Vinci produced pages “undifferentiated, spatially or otherwise, by their specific content” (92). Regardless of the extent to which da Vinci in particular influenced Basquiat, the

parallels Hoffeld draws between the two underscore the ways in which Basquiat's practices both situate indexicality as a specialized kind of literary writing and shed light on the extent to which all writing might contain the arbitrariness of the index, a multidirectional practice that sets the relations between paratext and text in play.⁶⁵

Young's "Pork," then, engages in a similar intermedia practice across different media. Consisting solely of a list like those that often appear in Basquiat's paintings, it functions as a typeset, mock-forged Basquiat painting that appropriates his textual aesthetic but stops short of the gestural marks of his handwriting, a deliberately failed *trompe-l'oeil* in the same manner as the record images that divide *To Repel Ghosts* into sides. This typographic distortion—a strategic inversion of the handwritten distortion that critical descriptions of Basquiat's paintings often suggestively and fetishistically describe as childlike, primitive, of the streets—is particularly apropos given that the track "Pork" is not about *Pork* the painting: whereas many of Young's tracks named after Basquiat paintings also list the year of the painting in question in their titles—for example, "Hollywood Africans {1983}" or "Fois Gras {1984}"—"Pork" has no such annotation.⁶⁶ Nor does the track employ small caps to mark its text as a direct quotation of writing in Basquiat's painting—if, of course, the text in the track were even in the painting to begin with (to my knowledge and in the scope of my research, the text in the track "Pork" does not appear in any of Basquiat's paintings). Young's constellation of words, references, and meanings in "Pork" is his own, a gesture in the manner of Basquiat but not, so to

⁶⁵ This practice has a microscopically material dimension as well: Marshall suggests that Basquiat "constructs a circular transformation of marks into letters, letters into words, and words into meaning; and then he reverses the cycle to permit the marks to reconfigure from meaning into abstraction, while emphasizing the integrity of the mark, the power of the gesture, and the fusion of representation and abstraction" (84).

⁶⁶ Young explicitly explains this "dating" technique in the text's liner notes: "Titles often correspond to paintings; the dates following titles apply to the work and are included to indicate a sense of the history of the art & artist. (Dates are *not* the dates of my composition)" (345, emphasis original).

speak, in his direct image. The track's indexical entries reverberate against one another like strange attractors to the titular term and to the painting it indirectly invokes; thus Young marks a system of analogical relations in the same way that Basquiat does, but across different media, producing a printed textual index that invokes and transposes Basquiat's practice of painted textual indexing without attaching to a particular instance or example of that practice.

Just as Young distorts and analogizes Basquiat's artistic, textual, and phonographic archive in *To Repel Ghosts*, he performs the same process on Basquiat's own historical persona. The closing lines of the track "Nature Morte" offer a compact announcement of this practice through a miniature description of Basquiat:

Full
of tions

(*read*: shuns)—
situ-, tempta-
frustra-

—he be all
suffix, all after
& -likes—

life, child, dis, un (270)

Young's distortive, segmentive use of text on the page presents several simultaneously overlapping and conflicting portraits of Basquiat late in his life and career. Taking up this passage's invitation to "*read*" it compositively results in a vision of Basquiat as full of situations, temptations, and frustrations, as well as lifelike, childlike, dislike (perhaps also disliking), and unlike (perhaps unlike any other artist or cultural figure), a collection of attributes that contains a number of contradictions in and of itself. Yet Young's micro-catalog also demands to be read discretely and separately as well as through

recomposition, an approach that makes its irregularities more explicit and palpable: taken at the face value of the text, Basquiat becomes at once both full of shuns and all likes, a public persona in crisis who is simultaneously resistant to and open to interactions in a manner literalized by the simultaneously decomposed and recomposable text of the passage. In this sense, the track's last line describes him through a sort of segmentive, phonetic dialect: "dis un" is a "life child," at once both young and old, in his prime and near the end of his life. Building in these layered tensions and syntheses, Young offers a self-reflexive annunciation of assertion and negation as a single, central practice for both himself and Basquiat.

By fragmenting, counterposing, and synthesizing language through these textual distortions, he offers a literary analogue for Basquiat's own practice of crossing out text within his paintings (itself a technique that Young appropriates). In the liner notes to *To Repel Ghosts*, Young quotes Basquiat's rationale for this gesture: "of such crossings, Basquiat said, 'I cross out words so you will see them more: the fact that they are obscured makes you want to read them'" (345). Basquiat's crossings draw in the reader/viewer, but at the same time make it impossible to read the words in question without both reading the crossout and reading the words *as* crossed-out as well. Similarly, Young's analogic techniques of layering and unlayering the meanings of words, cataloging them and breaking them up, push the reader to configure them in some idealized "correct" fashion so as to restore the "sound quality" of the text. Yet the reality, of course, is that these words can never be read apart from the accumulations, indexings, fragmentations, and compartmentalizations through which Young distorts them; they can never exist outside of the simultaneously textual and cultural dimensions that Young's

work on the page documents and produces. Of course, these claims could be made on behalf of any text to one extent or another. Yet what is ultimately at stake in the analogic, polysemic fragmentation and recombination of Young's wordplay is not merely the irresolvability of the text's binary oppositions, but rather the more specific distributions of these irresolvabilities through the particular ways in which Young configures distortion as part of a complex system of resemblance. At once distortive and constitutive of the text's sound quality, the layered words of Young's tracks function as points plotted on the multidimensional interface of black modernity, media history, and literary form. Constructing *To Repel Ghosts* around the constellation of these points, Young offers an aesthetics of black modernity before, through, and around Basquiat, within the distortion among the print textuality of literary writing, the visual signification of painting, and the sonic information of the record—a history in which cultural signification and reproductive and inscriptive technology recursively produce one another, circulating information and structures for that information back and forth in a manner that is as systematic as it is uneven.

Warped Grooves: Discography without Discs

Having traced a general outline of Young's analogic mediation in the section above, I now want to turn to the question of the phonographic in particular in *To Repel Ghosts*. What does it mean to write not only a given record's sonic content, but also the process of phonographic recording and playback and object of the record itself? How does the poetics of analogic overload that Young establishes as a working process in alphabetic writing approach the question of the analog itself as enacted and embedded in

the material dimensions of another storage medium? In its microscopic inscriptions of sound, the recorded groove contains the conditions for a broadly scalar irregularity that is at once profoundly self-impacted and profoundly expansive. Moreover, in being etched right in and on the record's analog surface, phonographic information is particularly susceptible to outside influence. In being directly touchable, the record's grooves are corruptible and distortable in ways that information systems such as print text or digital media are not.

Indeed, as Young's prefatory poem suggests, the physical immediacy of this corruptibility, its groovy roughness, is a defining characteristic of the vinyl record, and provides a determinative, generative aesthetic structure for *To Repel Ghosts*' linguistic and textual analogies with the record. Young's writing about records in *To Repel Ghosts* is nearly always already a multiply mediated process, as he stages it largely through Basquiat's paintings. Thus his textual representations of records are not simply tracks about records but rather tracks about paintings (which are, as I will discuss below, themselves often predominantly and at times even entirely textual) about records. In a critique of much of ekphrastic literature and interart and intermedia theory in general, Willard Spiegelman notes that the fact "[t]hat ekphrasis is generally taken as a 'verbal representation of visual representation' needs some modification when one contemplates . . . at a double remove" (112). Young's approach, in its complication of the system of relations between different aesthetic artifacts and media systems, implicitly answers Spiegelman's call. In this sense, it also exemplifies what Tamar Yacobi describes as the overlapping, multiply layered process of the "tripartite chain of mimesis," in which "[t]he visual source transforms in verbal re-imaging from a self-contained whole into a part of

another whole, hence from end to means” (22), part of a complex network of mediation that exceeds the “one-to-one relation postulated between the artworks” (24). Yacobi’s description of intermedia relations as a “chain” seems both literally and figuratively binding in its suggestion of a closed, locked causality controlling those relations. Her Venn-like conception of the larger whole of these relations, however, seems to controvert that image in a productive manner. By imagining different media and media objects as equally parts of a larger whole, in which means continually circulate without linkage to clear ends (or, indeed, to a clear ending), this schema provides a more specific framework for understanding Young’s constellation of his own literary work and Basquiat’s visual work in relation to the phonographic in particular as a media form. In considering Young’s formal theorization and appropriation of the phonographic, I want to focus on the two tracks entitled “Discography” for two reasons: firstly, the immediate reason of their explicit engagement with the phonographic disc as an object as announced by their title (which I discuss in more depth below), and secondly the way in which, in taking up the phonographic by way of the visual and textual realms through Basquiat’s *Discography* paintings, they explicitly raise the question of the phonographic as a question of multiple mediation. In doing so, these tracks trouble the possibility of a clear conception of the relations regulating how information flows between media, at once both expanding and contracting the analogic field on which these media interrelate. As the titles of the tracks themselves suggest in articulating this tension, what emerges beyond the possibility of clarity is a conception of mediation predicated upon distortion that is irreducible without being obstructive. Within the multiple media systems that Young imaginatively configures in these tracks, discography is neither a writing of discs

in the catalogic sense nor a writing on discs in the sense of the early phonograph, nor a writing by discs in the sense of the turntablism of early hip-hop, but rather a disc-writing defined by its incorporation of the distortion inherent in negotiating between multiple different information technologies.⁶⁷ In this sense, discography as Young conceives it yokes together the information storage systems of the phonographic, the painted, and the alphabetic while at the same time keeping them perpetually paratactically distinct, as modes of inscription and duplication that echo and revise one another across multiple surfaces.

Basquiat's paintings *Discography (One)* and *Discography (Two)*, both from 1983, present their own complex argument about intermedia relations through their approach to the titular process and object of discography. Both paintings consist of white block-letter inscriptions on black backgrounds, detailing the personnel and a partial track listing for Charlie Parker's famous Savoy Sessions of November 1945. Commonly considered one of the most important recording sessions in modern jazz, the Savoy Sessions also featured Miles Davis, Dizzy Gillespie, and Max Roach, and produced crucial takes of canonical bebop compositions including "Koko," "Now's the Time," and "Billie's Bounce." In each painting, Basquiat lists the name of the group that played the tracks listed (Charlie Parker's Reebopers [sic] and the Miles Davis All-Stars for compositions *One* and *Two*, respectively) and the pertinent players and their instruments, and lists a number of tracks recorded by that group, including numerous instances of multiple takes of the same track—five separate iterations of "Billie's Bounce," for example, or four of "Now's the Time" (sic), or two of "Koko." Each painting also has several unique elements as well:

⁶⁷ A full consideration of the inscriptive dimensions present in hip-hop's recontextualization of the turntable is beyond the scope of this essay. On turntable aesthetics and writing, see Miller 56ff. and Rose Chapter Three; on Basquiat's involvement in early hip-hop culture, see Sirmans.

One lists the location and date of its session and includes a square enclosing a listing of the record sides in questions (sides A-D), while *Two* includes crossed-out credits for Teddy Reig as producer and Harry Smith as engineer, as well as the Savoy catalog number and side and track placement for most of the takes listed (the first take of “Milestones,” for example, is recording number 3440-1, and is on side F, track 1). In conventional terms, the word discography connotes expansiveness and inclusiveness, referring to “a catalogue raisonné of gramophone records” or to “the study of recordings” (*OED*). Basquiat’s paintings invert this catalogic impulse, presenting several possible conceptions of how a conception of discography as an inherently intermedia practice might operate differently. Most explicit of these is the shift the paintings make from a global, macroscopic conception of discography to a microscopic one through their presentation of individual, internal tracks within a single recording event, as opposed to a comprehensive catalog of all of Parker’s works. However, in their shift away from the claims of comprehensive inclusivity posed by conventional discography, these canvasses do not idealize the local as offering an intrinsically more accurate or faithful capture of an artist, group, or event. On the contrary, in their attention to the discrete individuality of each take that they list, they explicitly acknowledge their inexact relation to the actual recordings in their status as textual information. The process of enumerating personnel, track listings, and other information marks the sounds on record, but also makes clear the inability of text to transpose them: however sonically different four consecutive takes of “Now’s the Time” may be, listing each of them without further description or qualification self-reflexively underscores the impossibility of a transparent rendition or representation of sonic material within the visual realm of Basquiat’s paintings.

Undifferentiated by any description, these track titles become iterative and indexical, their samenesses at the textual level reverberating against one another in an additive manner that amplifies the difference among the actual sonic tracks yet keeps it out of the reach of visual perception. Thus Basquiat's paintings imagine discography as an inevitably incomplete process of transcription, one that does nothing more (but also nothing less) than register its own inexact compatibility with the recorded sound it purports to transfer into another medium. Just as the radically nonalphabetic writing capacities of the early phonograph eventually gave way to its popularity as a means of playback, Basquiat's paintings perform a similarly one-sided, incomplete "playback" of the Savoy Sessions; in painting (sound) through text and writing (sound) through painting, these works triangulate around the recorded sound that is their subject, distorting it through reproduction in other forms.

Young's tracks "Discography One" and "Discography Two," each of which contains several subsections with its own individual title, take these paintings as their highly inexact points of departure. Young separates these tracks from direct connection to the *Discography* paintings in a number of ways: firstly, their titles differ in punctuation, lacking parentheses, and as in the case of "Pork," they have no datings to link them to the specific paintings in question. Moreover, these tracks do not transcribe the text of the *Discography* paintings in any substantive or sustained fashion. These distinctions suggest that Young uses these tracks to theorize a literary practice of discography rather than to describe the *Discography* paintings themselves as objects; across these two tracks, he triangulates the practice of discography through contrasting methods, taking approaches

that are each individually predicated upon different forms of inexactitude as well as dually related as inverses and reciprocals of one another.

“Discography One” consists of subsections focused on a series of famous figures in the history of jazz: Armstrong, Parker, Billie Holiday, Lester Young, and Max Roach. All of these artists figure in Basquiat’s work, but virtually none of the sections of the track (with the notable exception of “Now’s The Time,” which I discuss below) pertains to actual paintings. Instead, they function as generalized aggregate portraits of the musicians themselves, staged through Young’s characteristic polysemic puns and allusions. He describes Roach, for example, undergoing a Kafkaesque metamorphosis to become a literal roach, a multi-limbed survivor of the atomic era and a seminal architect of its rhythmic texture:

What had happened was—

He woke up one day
with the bug—
six-armed, slick—antennae

two sticks to beat things with

...
La Cucaracha taught

them beetles a thing

about survival, dropping
bombs (160-161)

Some subsections are more approximately (if not exactly) discographic, such as “Stardust.” This section traces Holiday through the bebop standard named for her and referenced numerous times in Basquiat’s *Discography* paintings, implicitly making Basquiat’s own discographic strategies part of the portrait:

“BILLIES BOUNCE”

“BILLIES BOUNCE”
Miss Holiday’s up
on four counts

of possession (158)

“Satchmo” and “Now’s The Time” pursue this indirect discographic portraiture even more extensively. “Satchmo” imagines Armstrong’s complexly dual racial and cultural image as a minstrel figure and an innovative artist as constituting the two sides of an imaginary record. “SIDE A” of this record consists of

black

wax grooves
going round
in an endless

endless grin (156)

clearly derived from minstrel iconography. “SIDE A” includes “I Wanna Be Like You,” a song from the film *The Jungle Book* that trivializingly appropriates Armstrong’s scat technique for the orangutan character King Louie: “*Oooh hoo . . . An ape like me/ would love to be// human too*” (156).⁶⁸ “SIDE B” offers a diametrically opposed vision of Armstrong as a complex sonic producer capable of “out-play[ing]/ Beezele Bub on a good// day” (157), his record’s “labels spun// too fast/ to read” (156). Compacting cultural oppositions and syntheses onto the two sides of a single imagined sonic object, Young uses “Satchmo” to theorize discography as a practice in which sonic technology and cultural information and identity become correlatives and producers for one another, literally part of the same medium in the track’s imaginative world. “Now’s The Time”

⁶⁸ In *The Jungle Book*, the character of King Louie is voiced by the Italian-American musician Louis Prima, while Young’s track invokes him as “King Louie Armstrong” (156). On Armstrong and scat, see Edwards, “Syntax.”

extends this approach in its attention to the Basquiat painting of the same title that serves as the frontispiece for *To Repel Ghosts*, both describing the piece as “blackened wood/warped” and appropriating its text:

“NOW’S THE TIME”
underline
PRKR
(157)

In the same way that the pages introducing each side of *To Repel Ghosts* distort its frontispiece (which, as I have suggested, itself distorts Basquiat’s sculptural painting, which in turn distorts the Parker record), this poem forces the visual material of the painting of “Now’s The Time” into alphabetic text: “underline” stands in for the actual line of the painted label in a manner that reproduces it while simultaneously foregrounding the inexactitude of that reproduction. This inexactitude reverberates back along the rest of the circuit of analog mediation that precedes the poem, from the frontispiece to the painting to the record and finally to the Parker performance itself captured (to an extent) on that record. Each of these artifacts exists as the product of an inexact, interdependent structural dialogue across forms that are themselves defined by their connective incompatibilities.

Representing these musicians through a descriptive and referential practice that deliberately relates to phonography in an opaque manner, remaining in many instances literally on the surface of the phonographic disc, Young’s work in “Discography One” outlines a broad practice of sonic materiality. Thus the track is, as its epigraph notes, “*made from original/ masters*” (156), in the sense of the mastery of the musicians represented as well as of the master recordings that often precede mass phonographic

pressings.⁶⁹ These aggregate representations, presented as source material prior to an anticipated moment of reproduction and dissemination, draw equally (as well as equally indirectly) from phonographic technology and discourse, Basquiat's paintings, and jazz culture in general. This synthesis articulates a departure from what Yacobi describes as "the one-to-one relation postulated between the artworks: one-to-one in the numerical as well as in the mimetic sense. . . . [T]he singling out of numerical oneness . . . all too often goes together with the privileging of mimetic correspondence, or lately, of mimetic rivalry, between the arts" (24-25). Indeed, there is no systematic, one-to-one relation that can be traced among the media objects and agents invoked by "Discography One," precisely because there is almost never simply one painting, one song, and one recording to relate, but rather a "common denominator . . . as distinct from a unique art-work" (Yacobi 23); even in the case of "Now's The Time," which draws directly and explicitly on Basquiat's painting, the multiplicity of takes on that composition as enumerated in Basquiat's *Discography (One)* makes it impossible to imagine a singular referent. Of course, this approach to representing jazz musicians through the "common denominator[s]" of their respective oeuvres and life stories—the tragic rise-and-fall narratives of Parker and Holiday, Armstrong's conflicted iconicity—could be accomplished just as easily outside the domain of the discographic. Viewed as such, Young's renderings begin to seem somewhat reductive, an idealized representation of the artists as heroized "original masters." Yet given the encyclopedic scope of *To Repel Ghosts* overall and the density and specificity of detail elsewhere, this reduction registers

⁶⁹ Early master recordings were pressed directly onto phonographic discs, with the use of magnetic tape mastering in place of phonographic mastering first appearing in the 1940s. All of the artists Young describes in this track recorded across this timespan, making it difficult to theorize the technological relation between mastering and the phonograph in this context in a fixed, singular way.

less as hagiography than as a deliberate means of reflecting on the capacities of the different information systems in play: by triangulating these portraits against Basquiat's *Discography* paintings and the phonographic objects they invoke, Young traces a complex system of inexact correspondences among the media forms of the LP, the painting, and the print text.

If in "Discography One" Young imagines discography as a holistic negotiation between writing, painting, and phonography, using overarching details and thematics to relate these practices through multiple layers of difference and similarity, in "Discography Two" he presents the inverse approach by directly appropriating the discontinuous and often disorienting text of Basquiat's paintings to constitute the entirety of the track's text. This track's divergence from the *Discography* paintings is even sharper than that of "Discography One:" its text comes not just from sources other than those particular paintings, but also from a collection of paintings that address jazz, sonic information, and discography in dramatically uneven ways, thus constituting a discography that veers from being literally and directly discographic to being virtually devoid of actual discs and even of music altogether. For example, the section "Jazz 1986" contains the text "CHARLIE PARKER REEBOPPERS" and titles of several Parker compositions ("MARMADUKE" and "STEEPLECHASE"), but the following lines seem to resist any context for or connection to this discographic information, and indeed the section as a whole seems largely arbitrary in its choice of text:

MARMADUKE
MAMADU
STEEPLECHASE—

CHARLIE PARKER REEBOPPERS

GUANO
FUEGO
“A IMAGE OF VICE”

(186)

Yet while such a poetics is radically discontinuous and non-narrative in its arbitrariness, it is paradoxically also exact in that arbitrariness. Through this approach, Young reproduces Basquiat’s catalogic, indexical effect without reproducing his canvases themselves altogether. The section entitled “Quality,” for example, consists of key words from the center swath of an almost entirely textual painting, centered on the page to echo the visual form of the painting:

POSTOAKOES
REST IN PEACE WHO TRUST?
WARM AIR FRONT

MASS SLUMS
CUTTHROATS
DUST BOWL

(187)

While these units of text, the first lines of the section, are undoubtedly front and center at the top of Basquiat’s painting, they are not the only lines in that area, and while some nearby lines appear later in the painting, some do not appear at all. Moreover, the wholly textual form of Young’s track smoothes over some of the elements of the painting, marks such as lines, arrows, and crossouts, that sit somewhere between the alphabetic and the imagistic. Through these complex negotiations with the material of Basquiat’s paintings, appropriations that are variously selective and wholesale at different levels of meaning, Young maps out a practice of discography that is always already a textual imageography prior to (and often in place of) being a discography as such. Indeed, in this sense, the mediating effects visible in “Pork” become visible not just as poetic techniques but also

the underlying strategies of a larger theory of media relations: the “Discography” tracks function to produce not *Discography* in the sense of Basquiat’s two paintings, nor discography in the sense of the conventional practice I allude to above, but rather a practice of “discography,” reproducing Basquiat’s approach (if not exactly his material) within the parameters of another media system.

This dually transcriptive and metatranscriptive technique exemplifies and extends what Spiegelman describes, in a discussion of Charles Wright’s writing on Piet Mondrian, as a crucial approach to contemporary ekphrasis:

the poet uses his tropes, a simile within a metaphor, to compare a thing to itself as well as to something else[.] . . . [T]he poem is an act of repetition as well as of reflection. It makes its own images out of Mondrian’s original one, sloughing a skin like a snake, getting farther away from an original (and becoming an image of an image of an image) while simultaneously revealing the new skin underneath. (135)

If Wright’s poetry on Mondrian is “an act of repetition,” it cannot repeat without also transferring the information of Mondrian’s canvasses into another media form; even the gridded coordinates and primary colors of Mondrian’s paintings have the potential to change form considerably when reimagined in written language. In taking Basquiat’s textuality as a starting point, Young extends this intermedia repetition to its logical conclusion and its breaking point in a single stroke (pun fully intended), producing lines that exactly reproduce Basquiat’s words at the level of language yet can never exactly reproduce his writing at the material level of orthography. By recording Basquiat’s media practices, Young’s appropriative tracks provide Basquiat’s paintings with an incomplete

image of themselves. In relying entirely on text from Basquiat's paintings, "Discography Two" suggests that repetition is the logical conclusion for approaching Basquiat's textual work on the printed page, but also acknowledges that exact repetition is ultimately an impossibility. Through this tactic, the intermedia tension and distortion of Young's work becomes most conceptually present and urgent as it becomes most materially irrelevant, visible only in the shrinking—yet ultimately unclosable—gap of meaning between a given unit of text on the canvas and that same unit of text on the page. In invoking Basquiat's paintings by emphatically *not* reproducing them, these repetitions take an internally contradictory approach that also echoes the paradoxes of the discographic images of LPs separating the sides of *To Repel Ghosts* with which I began my discussion of the book; in hinging on inaccurate reproduction, both approaches strategically claim a practice of seemingly transparent mediation in order to corrupt and reroute that mediation at the local, microscopic level. Viewed in the light of Young's use of discontinuous appropriation to produce tracks such as "Discography Two," the listings of track titles on *To Repel Ghosts*' dividing record-images constitute tracks in and of themselves, with each catalogic listing playing out the discontinuous commensurability of the paintings and tracks at a higher level of abstraction. From this perspective, these images function as units of inscription as well as bearing inscription themselves; they become tracks that encapsulate tracks. Thus the text's deepest instances of analogic media inscription take place not in the different visual layers of these images but rather in the uneven interchangeability, synecdoche, and analogy between the recorded text of its tracks and the textual records of its images as these two modes of storage recursively populate, overwrite, exceed, and reproduce one another.

Inaudible Man: Analogizing the Digital in Black and White

Like “Discography One,” “Discography Two” is prefaced by a short, gnomic epigraph: “*digitally remastered*” (186). This description speaks not only to the particular track it prefates, but indeed to the entirety of *To Repel Ghosts* and—paradoxically, given its foregrounding of the digital—to Young’s analogic approach to Basquiat’s work. In doing so, it moreover offers a condensed reflection on intermedia relations in general, both within any given textual event and across the larger sweep of media history. In order to construct a discography of Basquiat’s paintings, Young breaks them down into distinct textual components, a set of morphemes characterized by the discrete informational segmentation that also characterizes the digital; in this sense, each unit of text constitutes its own individual bit of information. He then remasters them in a fashion that resembles the aesthetically and materially open recontextualization synonymous with and sponsored by the cultural tools of digital technology (although far from limited to that technology). Yet as much as the finished product of these tracks resembles the mix and flow of digital technology in the sense of the computer, this remastering process is ultimately a process of the digital in the sense of the hand, the errant bodily extension grasping information without a larger rationale, producing inexact approximation through exact appropriation. *To Repel Ghosts* imagines complex, close lines of kinship among the seemingly distinct storage forms of the vinyl disc, the cloth canvas, and the paper page. The distortions that Young injects at multiple locations in the text and across multiple levels of translation and transcription suggest that these relations are ultimately far more unstable—more aesthetically variable, more deeply materially intertwined, more urgently at stake along

political and cultural lines—than the fluid reproducibility, simulation, and interchangeability by which the digital is often characterized.

Young's critical reading of analog mediation also functions as a reading of the ways in which that mediation is bound up with the shaping lines of racial difference and power. As I suggested at the outset of this chapter, considering the mechanics and aesthetics of the turntable in the uneven, analogic manner that Young does in *To Repel Ghosts* and the way that I have here helps to advance and deepen a critique of the black box/white box technosocial disparity noted by Delany, a divide often understood to take place and take shape in the break between the analog and the digital (or, in Delany's terms, between the street and the computer). Even setting aside the extent to which this divide is tenable, within an increasingly mediated culture it operates as productive of as well as produced by a more generalized complex of racial power structures, setting in motion "a self-fulfilling prophecy, confirming that people of color can't keep pace in a high-tech world that threatens to outstrip them" (Hines, Nelson, and Tu 2). These overlapping and interlocking terrains of power inarguably demand critical, artistic, and institutional attention. Young's attention to the turntable, however, also poses an argument about the multidimensional interface of information, race, and power as extending beyond sociological questions of access. Indeed, posing these issues solely or predominantly in terms of access risks underreading artistic endeavors such as Basquiat's and Young's, media practices that provide critically, aesthetically, and socially valuable divergences from white mainstream technoculture in their very operations. Moreover, such a traditional conception of the digital divide also risks seeing the racial differences along that technological line (whether they be quantitative or qualitative) as taking place

in discrete, circumscribed terms, rather than as symptomatic of and systemically present within a larger nexus of issues and pressures.

Young's textual analogue to the record instead traces circuits of separation and interpenetration, of equation and negation, that circulate and reverberate through every scalar level of the media-technological complex he outlines. While this system takes the analog system of the turntable and the LP as its anchoring point, in doing so it also speaks to an interwoven set of practices of racial, artistic, and technological meaning production that reaches backwards in history to the traditional print book and forwards to the abstractions of the digital computer. Through this reach, Young imagines the reconstellation and revision of a series of received cultural and semantic oppositions: the blackness and whiteness that define racial discourse, the writing and erasure that characterize authorial and artistic action, the one and zero, on and off that constitute binary digital information. He sees these not as opposite, identical, or dialectically constitutive of one another, but rather as connected through a nexus of relations that passes through all of these dynamics, putting different ones in play at various different moments. The materiality of the book is shot through with these reconstellations, from the multilayered *trompe-l'oeil* of its Basquiat frontispiece to the black-and-white vertigo of each side's opening page, and perhaps even to the black-on-white printing of the entirety of the text itself. Although *To Repel Ghosts* incorporates a more elaborate apparatus than many print literary publications, through this proliferation it gestures towards the ways in which textuality and media informatics in general reflect, produce, and are produced by these dynamics of power at every level. Gates claims that "in literature, blackness is produced in the text only through a complex process of

signification” (237). *To Repel Ghosts* takes this claim literally, extending the complex critique of dualism that Gates stages through literary reading down to the microscopic elements of the printed page, and thus imagining “blackness . . . produced in the text” through the literal process of printing itself, a process that is no more or less complex than the cultural and philosophical significations of the texts Gates discusses at the levels of language, allusion, and thematics, but is instead intimately bound up with those levels.

The track “Negative,” which opens side two of the text, directly engages these interpenetrating, multilayered inversions through its imagination of an uncanny alternate reality:

Wake to find everything black
what was white, all the vice
versa—white maids on TV, black

sitcoms that star white dwarfs
cute as pearl buttons. Black Presidents,
Black Houses. White horse

candidates. All bleach burns
clothes black. . . .
Is this what we’ve wanted
& waited for? (69)

As its title suggests, “Negative” is at once a speculative allegory of racial dualism and a critical revision of media history, drawing parallels between black and white as racial categories and as elements of obsolete cinematic and televisual materiality, while also directly engaging the issue of the print text’s overlapping position within these fields through its imagination of “dark pages written// white upon” (69). Yet as striking as the inversions that the track imagines are, all the more striking is the way in which Young refrains from imagining any larger upheaval coming from them. The track consists largely of premises of color inversion, without any discussion of their consequences. The

only explicit outcome, in fact, is the non-change of capital's role as a continually governing force: "Only money keeps/ green, still grows & burns like grass/ under dark daylight" (69).

In its reliance on the structures of visibility and optical inversion for its governing conceit, "Negative" stages an intertextual response to *Invisible Man*. This track extends the process by which "light projects the silhouette of . . . invisibility . . . light confirms invisibility as fact" (Weheliye 56) to the point of inversion and thus provides one possible extension of the novel's protagonist's incriminating suggestion that he speaks for his readers "on the lower frequencies" (581) because of his invisibility rather than in spite of it. Indeed, *To Repel Ghosts* as a whole extends and revises Ellison's use of turntable technology as a point of departure, lending a layer of imaginary materiality to the narrative conceit in which "the phonographic voice [of Armstrong, in the case of Ellison's novel] sonically reticulates imperceptibility as process, enabling a two-way sonic flow" that provides "the textural contingency for a subject of sonic Afro-modernity" (Weheliye 56). For Ellison, modern media technology is not only deeply intertwined with racial alterity but also generates paradoxes of difference and commensurability within its own systems of meaning production that recursively resonate with the paradoxes of race. The turntable both "grants the protagonist access to his invisibility" (Weheliye 53) as a black man and grants him and the reader access to the paradoxes (or, as Weheliye describes them, the "syncopated contradictions" [60]) of the "Blackness of Blackness" that he hears enumerated in the sermon he hallucinates while listening to Armstrong: "*black is . . . an' black ain't . . . Black will git you . . . an' black*

won't . . . It do . . . an' it don't. . . Black will make you . . . or black will un-make you"
(Ellison 9-10).⁷⁰

Young's record text multiplies and extends these phonographically stored paradoxes. While Ellison's protagonist fantasizes about having five copies of an Armstrong record, *To Repel Ghosts* presents itself as five sides, sonic technological objects that physically cannot exist together, yet somehow do within the domains of localized culture and artistic conceit, playing out the literally and numerically odd conditions that the prologue to *Invisible Man* imagines. More broadly, in the terms of the sermon Ellison's protagonist hears, Young's conceit of mediation implicitly suggests that, like any condition in an irreducibly analogical world, black is, and ain't, and yet is again, circulating through inexact resonances and relations ad infinitum. Indeed, this suggestion is also a self-reflexive one, implicating Young's own text and the broader systems and technologies of inscription and information storage that it invokes within this multiply recursive, self-contradictory condition. *To Repel Ghosts* is a set of records, yet of course it is not, and yet it still is; Young makes the argument that information itself is and is not and yet is, whether it resides at the level of the page, the canvas, the groove, the circuit board, or the culture at large. Staged through the imaginary mechanics of the turntable, this claim understands information as a charged and contested category in terms of both access and structural formation, and consequently seeks to wrest information from the progressivist rhetoric of the digital age, not in the interest of nostalgia, but rather on behalf of an irreducible potential for distortion and corruption as aleatory forces of aesthetic, material, and subjective reconfiguration. Hence the complex

⁷⁰ Gates notes (236) that this sermon signifies on an antecedent from *Moby-Dick*, another extensively paratextual reflection on race, mediation, and literary form.

intertextual play on color in the closing lines of “Retrospective,” the final track of *To Repel Ghosts*:

If only
 you’d said so
 long like a television
 station, signed off
 the air—Star

Spangled Banner
 blowing before bars—
 red, yellow,

more—color—
 before brief
 black—the static— (342)

Imagining both the discrete isolation of colors in “bars” as well as their reconsolidation in “static,” these lines eulogize Basquiat as a media practitioner. While Young addresses him directly here, he also makes oblique reference to the short-lived rock band known as Gray, and before that as Test Pattern, in which Basquiat played a central role (Sirmans 99). Yet these lines also make reference to the end of Hughes’ “Blues in Stereo,” the fifth mood of *ASK YOUR MAMA*:

DOWN THE LONG HARD ROW THAT I BEEN HOEING
 I THOUGHT I HEARD THE HORN OF PLENTY BLOWING.
 BUT I GOT TO GET A NEW ANTENNA, LORD—
 MY TV KEEPS ON SNOWING. (37)

While for Hughes the snow of televisual static is a figure of communicative and sociopolitical obstruction, Young sees the dissonance of static—in sonic, visual, and textual information—as the constitutive element of communication, and indeed perhaps its most dynamic and productive element. Information, as Young’s uneven sides suggest,

incessantly wraps back around on itself, extrapolating from analogues to produce other analogues, repeatedly contradicting and reasserting its most elementary communications.

**Towards a Language of Digital Materiality:
Circulation and Literary Form in Hari Kunzru's *Transmission***

After all, what is computer programming but the zenith (or nadir) of the Western attempt to invest language with presence?

—Stuart Moulthrop, “No War Machine”

It is always things—and I now mean this last word literally—which, in practice, lend their “steely” quality to the hapless “society.”

—Bruno Latour, *Reassembling the Social*

Digital Imaging: Scale, Techno-Rhetoric, and the Tyranny of Representation

Given that this chapter considers the impact of digitization on the written word and on literary writing, what effect would it have if I wrote it in binary code, the bedrock form of digital information? To put this question more directly and pointedly, what effect would it have if, instead of the first five words of the opening sentence above, this chapter began with

```
010101110110100001100001011101000010000001100101011001
100110011001100101011000110111010000100000011101110110
111101110101011011000110010000100000011010010111010000
100000011010000110000101110110011001010000110100001010?
```

Writing in binary would bring to the surface a rich paradox at the center of digital communication and digital culture: while writing this way would technically provide the necessary information, in perhaps the most basic form available—that is, a linguistic system confined to the two characters of one and zero—it would at the same time render it effectively incomprehensible to a human reader. After all, although every participant in the first-world economy probably relies on digital communication on a daily basis, even

if only indirectly, few if any of us can read the code that this communication takes as its root form.

In Chapter Three, I considered the analog aesthetic of the turntable as a media-theoretical counterstrike against the cultural hegemony sustained by digital technology. Using Young's deliberately inexact appropriation of the LP record in *To Repel Ghosts* to consider the digital and the analog in terms of their status as systems of meaning production as well as in terms of their status as technological formats, I showed how the analog, with its increasing technocultural obsolescence and its relation of different data by means of discontinuous, uneven commensurability, offers an alternative to the ways in which the rhetoric of digital culture imagines communication as malleable, fluid, and direct ultimately only to constrain that communication. I suggested that Young's structural and formal consideration of the record models a way in which writing might appropriate the properties of analog technology as a means of interrogating the aesthetics and cultural politics of technological information within the digital age. In this chapter, I turn more directly to the problematics of digital information and the global culture that this communication sustains. Focusing on how Hari Kunzru's novel *Transmission* (2004) interrogates the material operations of digital culture, I will argue for a media-theoretical approach that prioritizes the gaps, discontinuities, and opacities of the digital over its professed transparencies and fluidities, as well as for an approach to literary reading and writing that attends to these disruptions as central modes of meaning production within the landscape of digital culture.

First, however, I want to consider more closely the problematics of digital communication in dialogue with which I will outline these practices. From marketing to

manifestoes, contemporary culture is rife with expressions of enchantment with the liberatory promises of digital culture in general and code in particular from both critical and popular locations. The work of new media theorist Lev Manovich exemplifies this utopian idealism regarding digital technology:

in new media lingo, to “transcode” something is to translate it into another format. The computerization of culture gradually accomplishes similar transcoding in relation to all cultural categories and concepts. That is, cultural categories and concepts are substituted, on the level of meaning and/or language, by new ones which derive from the computer’s ontology, epistemology, pragmatics. New media thus acts as a forerunner of this more general process of cultural re-conceptualization. (12)

Manovich’s claims perform the process they describe, translating the (allegedly) unimpeded fluidity of digital coding into a seemingly equally unimpeded cultural fluidity. Within such a perspective, the computer is at once the symbol, the means, and the agent of a positivistic cultural change in which the malleable ontology of the operating system has the capability (whether direct or indirect) to reshape the contours and possibilities of lived cultural experience in its own image. This vision is characteristic of an increasing credence given to what N. Katherine Hayles describes as the illusory “techno-ecstasies” (*Posthuman* 6) of the digital age, within which the computer is seen as a universal force not only of subjective and collective emancipation but also of continuity and clarity.

Caren Kaplan describes this fantasy of digital freedom:

At the turn of the twenty-first century, the rhetoric of cyberspace and information technologies relies heavily on a hyperbole of unlimited power through

disembodied mobility. Whether we read theorizations of new cityscapes published by university presses or advertisements in magazines for wireless Internet connections, references to boundless space, unfettered mobility, and speedy transfers abound. In this heady environment, new technologies promise ever-increasing powers of transformation and transport[.] (34)

In addition to Kaplan's list of space, mobility, and transfers as physical categories believed to be points of virtual transcendence for subjects of digital culture, I would add continuity and transparency as an instance of the "hyperbole of unlimited power" in the realm of meaning production and reception. Indeed, continuity and clarity of communication are central to the necessary conditions of possibility for "boundless space, unfettered mobility, and speedy transfers" within an information culture. In order to provide these latter things, the rhetoric follows, digital communication delivers information with no loss of quality, no decay, no noise interfering with the message, thus overwriting and indeed canceling out the very conditions of discrete gaps and spaces that make its aura of fluid continuity possible.

The landscape of popular culture is altogether inundated with promises of this digital freedom—indeed, the cultural and financial capital produced by these promises seems to be the information technology industry's primary means of subsistence. Perhaps the most salient cultural example of this power attributed to the transcendent transparency of digital code occurs in the final scenes of the film *The Matrix*. Over the course of the film, the protagonist Neo—an IT knowledge worker toiling in his cubicle by day and an underground hacker by night—has discovered that life as we know it on Earth is nothing more than an infinitely elaborate computer simulation designed and implemented by the

evil sentient machines known as the Sentinels. At the climax of his final battle with the agents of the Sentinels, Neo gains the ability to see the world around him for what it is, an illusion made entirely of code, represented in the streaming green characters that provide some of the film's most definitive images. Neo's epiphany seizes upon a cultural desire at least as old as Babel and refashions it for the current historical moment, suggesting that code, with its discrete binary underpinnings, is eminently knowable, a point of access to continuity and security, and in turn that to "know" code in this fashion would be to see all and know all, and thus to be capable of moving through the world of digital capital fluidly and freely, without any risk of discursive, technical, or ideological obstruction.

However, just as the construction of the tower of Babel produces confusion rather than uniformity or transparency, no media, new or otherwise, can produce the stability and continuity of information attributed to them by the popular imaginary as visible in texts such as *The Matrix*. Likewise, no network can provide the constantly effectual and redemptive connectivity attributed to it by popular culture. The ubiquity of code as the underlying elemental material of digital activity holds out the implication that every operation of digital culture, every instance of action, production, or exchange, can ultimately be reduced to easily manageable ones and zeros. Yet notwithstanding the Messianic overtones of *The Matrix*, this promise is no more tenable for digital technology than for any other effector of cultural or technological change. The computer can function as a relay station, manipulating information and moving it among different sites of storage, and while it reduces information to the elemental form of ones and zeros in order to do so, this reduction hardly means that the flow of information is unimpeded or

impregnable at either the micro- or macroscopic level. On the contrary, code and the networks through which it circulates produce impediment as much as they (seem to) eliminate it, if not perhaps more so: the “anywhere, anytime ideal” of these structures “reveals itself as constrained by the vagaries of global business. . . . [T]he dream of endless, boundless infinitude and clarity is interrupted by the reality of redundancy, stoppage, and the messiness of political and social life” (Amrute 28-29), not to mention the messiness of technological operation itself. This dream, of course, is a necessary fiction rather than an actual intrinsic property of technology. Indeed, technology can only ever exist as a market and cultural force to the extent that such a promise of the open-ended, unmediated, transparent movement of information is credible, and this promise is itself in turn credible to the extent that it overwrites the discontinuities of the code it relies upon.

The aura of unproblematic, continuous communication and connectivity dreamed of by both the theoretical and popular cultural responses to the digital is itself underlaid and made possible by a system of information that is itself radically discontinuous and discrete, defined by gaps that are both infinitesimal in size and monumental in import. While this underlying instability exists within any system of meaning—and has indeed been the crux of critical approaches to language and writing over much of the twentieth century—it is inherent to and embedded within code at a uniquely essential level. As Hayles notes, “[a]lthough speech and writing issuing from programmed media may still be recognizable as spoken utterances and print documents, they do not emerge unchanged by the encounter with code” (*Mother* 39). Moreover, while this discontinuity as produced by code might be visible within speech and writing, it is itself the defining characteristic

of code, manifested within it as its discreteness: “[a]n operation scarcely mentioned by Saussure and Derrida but central to code is digitization . . . the act of making something discrete rather than continuous, that is, digital rather than analog” (*Mother* 56).⁷¹ In this sense, code renders the microscopic aesthetics and structures of communication fragmentary in a manner that is often disregarded at higher levels in favor of the rhetoric of digital fluidity and continuity. It problematizes communication at its lowest levels in a manner parallel to the conditions that form the foundations of deconstruction, yet also in fundamental opposition to them. Taking shape as discrete units of information—what Hayles describes as “*flickering signifiers*, characterized by their tendency toward unexpected metamorphoses, attenuations, and dispersions” (*Posthuman* 30, emphasis original)—code entails the discontinuity and destabilization of communication precisely because of its material discreteness and dualism rather than in spite of it. The gaps between digits of binary code are at once (virtually) invisible, immeasurable, and irreducible; they make information easy to transmit, yet also easy to fragment and corrupt. The network constitutes a similar paradox. In sustaining the promise of connecting every agent in the global system to every other agent, however indirectly or nonlinearly, it necessarily builds redundancy and arbitrariness into its structure and its processes of operation; the very possibilities of serendipity and redemptive connectivity as provided by network structure are premised upon (and against) the much greater likelihood of connections that are themselves discontinuous, linkages of information and subjects that remain semantically and culturally opaque in their randomness.

⁷¹ Although she does not develop it in great depth, Hayles offers the provocative suggestion that code’s making-discrete is not only the technological parallel to poststructural instability, but also its historical antecedent: “the dialectic between presence and absence came clearly into focus with the advent of deconstruction because it was already being displaced as a cultural presupposition by [the] randomness and pattern” (*Posthuman* 43–44) of digitization.

What representational and responsive possibilities exist for writing in relation to the problem of the digital? Digital technology constitutes a particularly complex challenge to the representational capacities of the novel form: the information of the digital—the sequencing of code, the connective structures and pathways of the network—is discrete and iterable, yet scarcely commensurable with the constraints of the linguistic information of the novel, and moreover radically different from it in both scale and kind. Most novelistic representations of the digital, then, have been largely transpositional, domesticating the materiality, discontinuity, and opacity of the digital without acknowledging their doing so. I want to turn briefly to William Gibson’s *Neuromancer* (1984) as a means of delineating this domestication. *Neuromancer* is widely held as the seminal text of cyberpunk literature, a genre that, with its thematic attention to such issues as virtual reality, hacking and digital piracy, and cyborgism, has arguably provided the predominant literary investigation into technology since the rise of the personal computer in the late 1970s and early 1980s. Gibson’s novel offers as its primary aesthetic innovation a conception of the digital in which the production and perception of information as visual imagery take precedence over—and ultimately absorb—the material dimensions of that information. Although *Neuromancer* is perhaps most famous within culture at large for Gibson’s invention of the term “cyberspace” to characterize the world of digital networks, its intense focus on complex, densely saturated visual information as a means of representing both the virtual world of cyberspace and the real world of offline experience is perhaps the most sustained and notable intrinsic dimension of the text. In the perceptive, technologically inflected language of Alan Liu, the “look and feel—the ‘interface’ of Gibson’s fiction, as it were . . . establishes not just the setting

but somehow the substance of the fiction, as if the plot were ultimately just a vehicle for communicating the ‘look’ that the works are really ‘about’” (336). The most famous thematization of this look and feel of the digital future appears in a moment of exposition delivered by a television program early in the novel, a passage that Liu dubs “the ‘city lights’ passage” (336) in reference both to its content and to its frequent deployment as a synecdochal shorthand for *Neuromancer* and cyberculture more generally:

Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts . . . a graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding. . . . (51, ellipses in original)

Shortly following this précis, Gibson’s protagonist Case re-enters cyberspace after a long separation, and we see this process of the “graphic representation of data” at work:

fluid neon origami trick, the unfolding of his distanceless home, his country, transparent 3D chessboard extending to infinity. Inner eye opening to the stepped scarlet pyramid of the Eastern Seaboard Fission Authority burning beyond the green cubes of Mitsubishi Bank of America, and high and very far away he saw the spiral arms of military systems, forever beyond his reach. (52)

The descriptive intensity of Gibson’s language in this passage—indeed, in both passages—betrays the conditions of cyberspace that the first passage imagines. This access to the inner world of networked computers is not a representation of “data

abstracted” but rather precisely the opposite: the imaginative construct of cyberspace concretizes data, rendering in it in a visually representational form.

Gibson’s language, then, performs the same operations in these passages, effectively making visible (and visual) what is essentially incomprehensible to human sensory perception; in Manovich’s terms, Gibson “transcodes” the discrete unreadability of the network and the data that constitute it into familiar visual language. As in a number of similar passages in *Neuromancer* and other early works, Gibson produces a “look and feel” for data itself: its anthropomorphic “arms;” the Euclidean spaces of its “pyramid[s]” and “cubes;” its “constellations,” like those in the sky, imposing visual order upon organic, nonstructured space; and most notably its resemblance to “city lights.” Indeed, the “city lights” metaphor has the renown Liu attributes to it precisely because of the way in which it encapsulates both Gibson’s specific narrative use of cyberspace and the parameters of conventional literary representation of technology more generally: the novelistic investigation of the digital is for Gibson a process of metaphorization, what Julian Stallabrass describes as data’s “transformation into readily understood visual forms” (8). Through the speculative conceit of cyberspace, Gibson writes onto data the conditions of its own manageability as visual material. Viewed in this fashion, cyberspace serves paradoxically not as an escape from the binding materiality of lived physical experience in the world of the novel, but rather ultimately as an aesthetic escape from precisely the digital world to which it provides access. It is a domesticating interface through which to come to terms with the proliferating data, networks, and transmissions of then-nascent digital culture: providing “a retreat from the differential values of the symbolic into the absolutism of the imaginary” (Myers 904), Gibson’s

technique takes the reader behind the interface of the computer only to provide another mediating gesture through which to view the raw information of digital culture.

If the prevailing representational approach typified by *Neuromancer* works to transcode the opaque structures of digital communication into legible textual form, Kunzru's *Transmission* begins with a deceptively clear evocation of that communication itself. The prologue to the novel begins by describing an electronic communication that promises legibility and continuity in the extreme:

It was a simple message.

Hi. I saw this and thought of you. (3, emphasis original)

In attributing such legibility to digital communication, these lines stand in as a rhetorical evocation of the seemingly universal ones and zeroes of binary code—"Hi. I saw this and thought of you" is "simple" in part precisely because of the quintessentially simple digital information that underlies it. Yet the novel that follows these lines reveals the message to be anything but simple at the level of narrative event: "Hi. I saw this and thought of you" is the text of an email with a devastating computer virus attached to it. This virus is attached to a digitized video loop of Leela Zahir, a fictional Bollywood actress, dancing in the streets of London. When the attachment is opened, it plays this loop and then promptly crashes the computer that it has infected. This destructive end result—a disruption of communication that eventually expands to a global scope over the course of the novel—begs a strong readerly skepticism of the professed directness, confidence, and clarity of the opening lines. Just as Jane Austen's pronouncement that "[i]t is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of a wife" (1) in the opening line of *Pride and Prejudice* invites the reader to read

the novel that follows as evidence against that very pronouncement, the intensity of Kunzru's opening straightforwardness intimates that the message in question is indeed far from simple, as the narrative that follows illustrates. In this sense, these opening lines perform the effects of the virus that they introduce, promising a contract of clarity with the reader only to break that contract with the chaos, complexity, and discontinuity that follow. Yet this rhetorical gesture is not only a comment on the narrative trajectory of the novel and the operations of the virus as its central plot device but also a self-reflexive commentary on the very modes of communication in question. This critique of cyberculture's rhetoric of the computer as a tool of connection and liberation gains power from its use of the message's simplicity as a lever against which to work. Kunzru's disingenuous literalness seems to suggest that it is not only the particular message attached to the Leela virus that is not simple, but indeed messaging within digital culture altogether. Rather than giving way to reveal the visible world of *The Matrix*'s streaming green truth, or the idealized, fluid transcoding of cyber-rhetoric, or the ultimately representational, anthropomorphic structures of Gibson's cyberspace, the message that opens *Transmission* serves as the surface manifestation of a digital communication that bluntly resists assimilation into legibility at multiple levels, both in its virally destructive nature and in the discrete, resistant ones and zeros that underlie and ultimately betray its professed clarity.

The prologue to *Transmission* ends with another formal feature that bookends and complements the effects of these first two lines, establishing an initial framework for the novel's critical consideration of digital information. While the novel's opening lines represent the complexity of code and the challenge to reading that it presents, the prose

poem that closes its prologue serves to perform the discontinuity of digital global culture at its widest scope, in the form of the network. I quote the poem in its entirety below in order to consider fully the ways in which it raises questions of global connection and discontinuity through form and structure rather than content:

Morning through venetian blinds.
 A cinema crowd watches a tear roll down a giant face.
 The beep of an alarm. Groans and slow disengagement of limbs.
 She shuts down her machine and
 They sit together in a taxi
 A curvature. A stoop.
 She swivels her chair toward the window and
 Someone in the stalls makes loud kissing noises
 poor posture
 between the two of them a five-inch gap
 she takes another bite of her sandwich.
 laughter
 the posture of a young man standing outside a New Delhi office tower.
 An arbitrary leap into the system.
 Round-shouldered, he stands for a moment and pokes a finger inside the collar of
 his new
 polycotton shirt. It is too tight. (4-5)

Here, as at several other crucial moments in the novel (a number of which I discuss over the course of this chapter), Kunzru's writing prioritizes a formal and structural evocation of the circulatory patterns of connection and disconnection as its primary avenue of meaning production in response to global digital culture, rather than the aesthetic content of that writing as such. With varying degrees of determinacy, the poem seems to trace its way back and forth through emblematic moments in the lives of the novel's main characters. For example, the lines "A curvature. A stoop. . . . poor posture . . . the posture of a young man standing outside a New Delhi office tower. . . . Round-shouldered, he stands for a moment and pokes a finger inside the collar of his new polycotton shirt. It is too tight" form a thread describing the novel's protagonist, Arjun Mehta, as he prepares

to enter the office tower in question for a job interview that will set in motion the events of the novel. Similarly, the lines “A cinema crowd watches a tear roll down a giant face. . . . Someone in the stalls makes loud kissing noises . . . laughter” describe a scene in a movie theater showing a film starring Leela Zahir, who has a plotline of her own in the novel, while “Morning through venetian blinds. The beep of an alarm. Groans and slow disengagement of limbs./ She shuts down her machine and/ They sit together in a taxi . . . She swivels her chair toward the window and . . . between the two of them a five-inch gap” provides a typical morning in the troubled relationship of the central characters of the novel’s third plotline, the London-based global branding executive Guy Swift and the Swiss film-industry publicist Gabrielle Caro.

Each of these strings of lines provides a characteristic thumbnail representation of the characters—Arjun as the stereotypically awkward techie, Leela as the larger-than-life icon, Guy and Gabrielle as the global power couple in crisis. Yet none of the moments these lines depict has any direct connection in and of itself with the events of the novel, and Kunzru makes no direct references to the poem or its contents over the course of the novel. Instead, these flashbulb moments provide Kunzru with arbitrary representational material with which to trace overarching structures and patterns (rather than scenes) of global connectivity through language. Indeed, the poem’s content is banal and typical in a manner that becomes virtually ineffectual and blank in and of itself, serving instead as the context through which Kunzru makes the structures of global technocapital alternately visible and invisible. This global structural strategy serves as a counterpoint to the compacted evocation of binary code that begins the opening section of *Transmission*. Just as the first two lines of the novel offer a literalization of digital communication as

disingenuously direct at the microscopic level, the structure of the prose poem that closes the prologue represents the global sweep of digital culture as impossibly closely connected across space and time. Moreover, the prose poem asks to be undone through reading in a manner that consequently interrogates the very structures of the network that the poem seems to trace. The poem compels the reader to make sense of its connections (and to read the novel that follows it in order to do so), while at the same time deferring and even altogether blocking those connections. Indeed, the characters in *Transmission* are connected not by common traits such as shared political interest or mutual longing for human contact in the chaos of the global world system, but rather by the figure of the computer virus that is at the heart of the novel. In addition, many of the poem's lines—for example, “laughter,” “she takes another bite of her sandwich,” or the almost anticlimactically self-referential “An arbitrary leap into the system”—are vague enough to make it difficult to attribute them to any scene or character with much certainty. This lack of coherence is not a solely writerly effect per se, but rather a function of Kunzru's attempting to represent global networking as subject matter, appropriating the structures and operations of networking as the poem's own in order to stage a critical rethinking of those structures and operations: while the poem is a “network poem,” so to speak, it assumes this status not because of the unexpected, indirect, complex connections it reveals but rather precisely because of the opposite effect, namely the discontinuities and blank, opaque relations it reveals.⁷²

⁷² In the opacity produced by these ambiguous, potential connections, Kunzru's poem resonates with the “schizophrenic fragmentation” Fredric Jameson sees as registered by the use of the “sentence in free-standing isolation” as the operative unit of Language Poetry and postmodern cultural production more generally. Jameson notes that Bob Perelman's poem “China” (which resembles Kunzru's poem stylistically) has “little enough to do with that referent called China” and is actually conceived as a series of captions to a photo album Perelman found in Chinatown, “their referents another image, another absent text; and the unity of the poem is no longer to be found within its language but outside itself, in the bound

This approach speaks to a self-conscious concern with structure—the structure of the novel, of the network, and of the novel in the age of the network—on Kunzru’s part. He engages structure as a material, technological question within digital culture prior to any particular teleology or instance of coherence, and indeed perhaps precisely in opposition to them. Instead, he uses the prologue to *Transmission* to juxtapose the macroscopic discontinuities of the network with the microscopic discontinuities of code. His representation of these domains suggests that neither of them functions in a semantically or ideologically assimilable fashion; in place of them, the novel presents a collection of overlapping, complementary, and contestatory systems of informational flow, which are themselves connected, outlined, and made visible by the operations of the computer virus. These systems in turn open up the question of either domain’s legibility and about the ideological assumptions of attempting to read or write those domains, either within the novel or within culture more broadly. Of course, the effects of the prose poem and the novel’s opening lines derive their power from the problematics of language that underlie any and all communication. Kunzru’s complex textual evocation of the flickering signifiers of digital information relies on conditions common to all signification, and while continuity and intelligibility are promised and inverted in particularly dramatic fashion and with particularly urgent implications in the case of digital communication, a similar process takes place across any number of forms, domains, and texts. Yet Kunzru’s consideration of these problematics takes on a dramatically different valence in its position in a novel that is explicitly and centrally *about* a specific instance and form of communication at the extreme—communication as

unity of another, absent book.” Of course, Kunzru’s poem differs from Perelman’s in that its unity (or perhaps lack thereof) derives not from another book but rather from another system of (dis)unity, the “immense, unfinished social experiment” of global technocapital and the Internet (Jameson 28-30).

digitally encoded, globally dispersed, and virally suppressive of all other communication. By beginning the novel with these formal methodologies, Kunzru imagines a shift in focus away from a narrative of communication towards a narrative aesthetics that takes its inspiration from the operations of the virus. The novel's central concern is not aesthetic material in the sense of *what* is transmitted, but rather the titular process of transmission itself at all levels of scale. By approaching this concern through the figure of the virus, Kunzru introduces the possibility of an otherwise invisible glimpse of the system of global telecommunications at the extreme, actively working against its own constitutive conditions and its own outer limits. The formal techniques that he uses to describe the virus over the course of the novel (to which I turn later on) press against the limits of the novel form in a way that reveals the inadequacy of representing the global flow of digital information through either conventional narrative (including his own) or traditional, teleological ideological assumptions.

From Digital Bodies to Viral Bodies: The Global Traffic in Information

The main text of *Transmission*, however, begins on a more human scale, with the narrative of Arjun Mehta, a twenty-three-year-old computer programmer born and raised in New Delhi. Thus before turning to a discussion of the virus, I want to trace how the novel treats digital circulation at the narrative level, as a way of establishing a context against which its formal techniques operate. In order to fulfill his dream of coming to America to land a top job, Arjun signs a contract with the Databodies information technology consultancy corporation and finds himself on a plane to California in a matter of days. Before leaving home, Arjun imagines a stereotypical fantasy of America as the

land of hard work and opportunity in the global idiom of technologized play: “Silicon Valley . . . so exciting that like Lara Croft you had to rappel down a cliff-face to get in. One up. Player Mehta, proceed” (22). Staged at the level of the virtual—taking place literally inside a video game, as it were—Arjun’s fantasy embodies the “unfettered mobility” and “ever-increasing powers of transformation and transport” that Kaplan sees within the rhetoric of the digital. However, the reality of Arjun’s life in America is far less transparently negotiable, both in economic terms and in cultural ones. He finds himself without work for long stretches of time, sharing a house with three other Non-resident Indian information technology workers and experimenting in what Kunzru describes as American “[l]inguistic glamour. Examples: when he watched TV, it was the ‘tube,’ when he thought of his parents, he didn’t think of them as his parents, but as ‘the folks back home.’ The others did it too; little experiments with slang, tentative new accents” (39). Through these “experiments” in language—which he condenses into the list-like one-line paragraph “The folks. The bench. Man, good” (39)—Kunzru marks Arjun and his housemates as out of place within the uneven systems of language produced by global telecommunications. Global telecommunications brings them into the linguistic, cultural, and economic sphere of the United States, but it is also the very force that makes them outsiders within that sphere.

Kunzru embeds the material of digital communication within the flow of *Transmission*’s text, articulating the integral ways in which Arjun’s narrative is itself both an instance and a product of global information circulation. The language of an email Arjun sends to his friend Amir back in India exemplifies this synthesis in the way

that it articulates the complex linguistic, cultural, and technological dimensions of his condition in America:

From: arjunm@netulator.com
 To: lovegod2000@singhshack.com
 Subject: RE: small pants?

hello aamir thank you for your message how are you yes i am all american now even eating beef pork products that is between you and me someone just gave bacon cheeseburger this is how it starts things ok here yes lots of girls wear short pants yes it is nice no have not spoken to many yet or seen p anderson or bv slayer busy got to go—
 arjunm (44)

In its uninterrupted flow, lacking the demarcations of capitalization or punctuation, Arjun's email echoes the streaming, boundless abstraction of digital code. Indeed, his language seems as if it were stripped down to the bare informational minimum in order to convey its message with maximum efficiency, occupying as little bandwidth as possible in the data flow from California to New Delhi. In this context, digital communication's promise of seemingly liberating efficiency and speed becomes an imperative at the level of language: Arjun must "talk fast" in his email precisely because the information he sends moves so quickly itself. Even the content of the message takes shape in the image of the binary ones and zeros of code, disingenuously excising the ambiguities of cross-cultural experience: yes, he is already all-American; yes, lots of girls wear short pants in America; no, he has not spoken to many of them; no, he has not seen Pamela Anderson or Buffy the Vampire Slayer. Yet the simplicity of Arjun's responses to his friend's questions paradoxically produces a complex state of semantic overload, as the clauses and phrases of the message exceed their bounds and mix with one another: does Arjun mean to say that he is "all-American now—even eating beef, pork products, that is" or that he is "eating beef, pork products. That is between you and me [i.e., him and Amir]?"

Or is it between him and his friend Amir that “someone just gave bacon cheeseburger?” The potential meanings within Arjun’s text circulate indiscriminately between disclosure and secrecy, refusing to offer a transparent communication. The ambiguity around “between” is particularly pertinent—the entity that is most in-between, after all, is Arjun himself.

Yet the ultimate effect of the message is not merely ambiguity as such but rather a condition that is at once both dissonant and discontinuous, generated by the way Kunzru embeds Arjun’s articulation of cultural confusion within the material context of digital communication produced from code, a form predicated on binary simplicity at the elemental level. His rhetorical strategy here pushes the professed continuity of digital information to its extreme, at which point it becomes a sort of irreducibly polyvalent stream in which multiple contradictory messages paratactically resonate within and against one another. Through this effect, Kunzru suggests both that binary code and digital communication cannot accommodate the complexities of lived cultural experience and that they structurally produce their own specific complexities and moments of dissonance independent of the content they contain. From Arjun’s position, Indian experience and American culture cannot be reconciled, no matter how enthusiastically he describes his imagined assimilation. Indeed, it is this enthusiasm itself, as subjectively registered within and structurally produced by the rhetoric of email, that short-circuits his communication. Moreover, this irreconcilability itself cannot be represented through the superficial simplicity of the discourse of email, but rather only through the rupture and overload that are irreducible elements of that discourse as much as simplicity is (or seems to be), built into this form of communication at its most fundamental technological level.

Thus the informational dissonance of email as a globally circulating, instantaneous mode of electronic communication operates not just as a rhetorical means for transmitting the expression of the cultural disjuncture Arjun is experiencing, but also as a key constitutive element of that disjuncture. This constitution takes place as a negotiation between the technological form and personal narrative of his email, with the contradictory and commensurable gaps of the raw code underlying his message resonating against parallel gaps in his cultural and geographic migration. The very codes that have structured Arjun's movement to America subsequently corrupt his channel of communication back home. He exists and communicates under a set of sociotechnological conditions articulated by Edward LiPuma and Benjamin Lee:

though the new communication technologies, exemplified by satellite-linked internet cafés in small cities in Africa and South Asia [not unlike Gabbar Singh's Internet Shack, the business run by Arjun's friend Amir], create an equality of access to information at the level of the subject, the socio-structures and cultures of circulation also, and at the same time, engender an objective dependence that inhabits the very conditions of connectivity itself, so that individuals' acts of subjective freedom are always self-annulling at another and higher level. The conditions of connectivity . . . are also the conditions of encompassment and domination by circulatory capital and the infrastructure of the metropole generally. (46-47)

LiPuma and Lee's claims suggest that the central problem of global technocapital is less and less a problem of uneven access to communicative connectivity, and more and more a problem of uneven agency within that connectivity produced at least in part by the

extension of that connectivity, a problem that Kunzru registers through this resonance between form and narrative. In staging the global (in all senses of the word) problem of digital communication through a local, directly rendered act of digital communication, Kunzru imposes this internally dissonant effect upon the reader: just as Arjun exists within America but can neither read nor write its cultural material with any clarity (and indeed can only write its lack of clarity), Kunzru presents the reader with the material of Arjun's email, yet the way in which its form speaks to both its cultural location and its underlying technological structure makes it impossible to read as a stable communication.

The content of Arjun's email points to a paradox at the level of meaning similar to that at the level of form. His message is saturated with a multiply contradictory sexual energy: even though his writing is marked in part by absence and negation, he is, after all, writing about women in revealing clothing and female sex symbols to a friend who uses the email username "lovegod2000" and sells pornographic CD-ROMs, "eight hundred plus lovely ladies on a single disk" (26), to supplement his work at an Internet café in New Delhi. Yet in a subsequent reversal of these terms, Arjun's life in America offers relatively little in the way of sexual energy or activity at first. After over a year of crisscrossing the United States, floating among temporary jobs, Arjun lands a position at the antivirus corporation Virugenix. Sexuality and desire in general seem to be colonized by technology in the IT community Arjun circulates within at Virugenix. One of his fellow employees, for example, only shows "discernible enthusiasm . . . for a certain series of telephone switches used by Pacific Bell in the early seventies" (57). Arjun's own sexuality, while not as fully supplanted by technophilia as this coworker's, is certainly interwoven with it: responding to a series of online questionnaires circulated in the office,

he learns that “[h]is penis was of average size. He was not a secret Mac user, though his lack of familiarity with sex toys and his inability to recall an occasion where he had dressed up in leather or rubber clothing to please his man rated him ‘an old-fashioned gal’” (55). Just as the binary yeses and nos of his email to Amir produce confusion rather than expressing clarity, here the discrete process of information-gathering—the “entertaining data sets” (54) that pass for socializing at Virugenix—produces the net result of making Arjun himself sexually indistinct, a “gal” with a penis that is neither abnormally large nor abnormally small. Of course, the intermingling of sex and technology that Kunzru imagines here is hardly a surprise given the context in which it takes place. Indeed, particularly in the way he renders this corporate environment for comic effect, he trades upon the cultural stereotype of the information technology industry as populated by socially awkward laborers who prioritize technological information over embodied personal interaction, displacing repressed sexual energy onto fetishized objects and actions. More broadly, technology has been represented as at turns tied to, producing, and supplanting sexual desire since at least the emergence and feminization of mass culture.⁷³ However, the tension that Kunzru underscores here takes on a more specific import given Arjun’s status as a globally itinerant knowledge worker. A virgin at twenty-three, Arjun is at a profound disadvantage in the comparatively sexually liberated environment of the United States, with both his geoeconomic mobility and his sexual mobility regulated and circumscribed by external forces. He is at the mercy of the tellingly named Databodies corporation for both his employment and his home as well as at the mercy of American culture for any and all sexual stimulation—when he finally loses his virginity to his bisexual coworker Christine, he describes it as

⁷³ For two different perspectives on this historical conjunction, see Huyssen and Kittler.

her solving for him “the uncomputable problem of finding another person to touch and be touched in return” (85).

Kunzru contrasts Arjun’s sexual and spatial circumscription within the world of the novel against the extreme mobility of the computer virus Arjun produces and disseminates. As the two key agents within the novel’s narrative, Arjun and the Leela virus move through similar circuits (figurative and literal ones, respectively) of global technocapital, yet they do so on radically different scales and with radically different stakes. On the one hand, like the biological forces from which they take their name, computer viruses pass from site to site, carrier to carrier, in a manner that is rapidly and rampantly expansive yet at the same time effectively devoid of any agency or intentionality. Although viruses lack consciousness or will in the humanist sense, their underlying project is to exploit the structures of global connectivity in order to be distributed as widely as possible, in as many places at once as possible. By contrast, Arjun circulates through the network of global technocapital precisely because he does not control his place within the information economy, regardless of his will. Effectively indentured to Databodies, Arjun moves from India to California to Maine and back to California again in pursuit of short-term contract work, pursuing a closed path of circulation in which he relies upon the instabilities of the information economy for his subsistence rather than decisively intervening within or manipulating that economy. The virus Arjun creates (which I discuss more closely below) is capable of reproducing and circulating itself within the global network in a way that he never can. Of course, the loss of control that Arjun experiences as a result of his entrance into the global information economy—his subordination to the “conditions of connectivity” that make his existence

possible, his simple, narrowly linear range of movement within a vastly complex and decentralized network—is, in the main, nothing new within the regime of global late capital. Similarly, the implication that technology has, in the figure of the virus, surpassed human capabilities of motion, control, and reproduction—or, alternately, that it has potentially allowed humans to extend their own capabilities—has an even longer lineage that extends (in varying tones of panic and praise) at least from Plato's *Phaedrus* to the contemporary technological determinism of Friedrich Kittler and the utopian rhetoric of Marshall McLuhan and the revival of his work in the late 1990s.

In centering his novel on a computer virus, however, Kunzru brackets these more generalized issues in order to turn to an extreme case of how digital information circulates through the global reaches of the internet. His conceit makes the argument that prior to considering the broader historical stakes of digital technology—indeed, in order to consider those stakes in a meaningful way—it is first necessary to consider how that technology works on a local, specific level. This question comes to the fore in the novel's second act, when in an inevitable market downturn, Arjun is laid off from his position at Virugenix and consequently faces having to return home to his life in India. His response to this turn of fortune is to unleash the Leela virus. While this action ultimately has destructive results, it is not an act of vengeful cyberterrorism or deliberate intervention within the larger global network. On the contrary, Arjun's reason for unleashing the virus is almost tautologically naïve and self-contained: he figures that if there is a virus that only he can combat, he will be able to prove his worth to his employer, regain his job, and remain in America. In this sense, his motive further underscores his status as an ephemeral body in the IT industry, vastly inferior to the virus' capabilities of movement

and self-preservation through reproduction. In its use of the image of Leela Zahir, the virus also has an aesthetic and cultural dimension. The Western characters in the novel are at first almost uniformly ignorant of the figure taking over and crippling their computers, a cultural blind spot that becomes something of a running joke within the novel. As such, the attachment of Leela's image to the virus functions as an indexical mark of the differences in global scope and visibility between Western, Anglo-American popular media and the massive, yet comparatively far less visible and lucrative, world of Bollywood. In an extreme case of the old maxim that any publicity is good publicity, Leela-as-virus circulates much wider than Leela-as-film-star could ever hope to, exponentially increasing the global profile of the previously regional actress. Moreover, the appropriative gesture that Arjun performs in attaching a computer virus to a video loop of Leela might be said to thematize a number of key issues about global digital culture: it functions as an authorial collaboration between an invisible hacker and a (relatively) famous movie star; its decontextualized moment of musical and visual information amounts to a highly evolved form of sampling; it catalyzes a global mystique around the image of Leela Zahir that presciently anticipates the widespread popularity of YouTube and viral video shortly after the publication of the novel.

Yet these cultural issues seem less important to Kunzru than the structural and operational question of the opaque technological materiality of the virus and the networked relays of connection and circulation that it illuminates. Indeed, the visibility of Leela is itself dramatically in question within the novel. While the human Leela gains increased cultural visibility as a result of the virus, the Leela-image, as it were, appears tantalizingly little within the text. When it does appear, it does so in a fashion that is

fairly oblique given the centrality of the virus to the plot of the novel. In the opening lines of the novel, for example, Kunzru refers to Leela “dancing in jerky QuickTime in a pop-up window on your screen. Even at that size you could see she was beautiful, this little pixelated dancer” (3). Later he tellingly writes that Arjun’s thrill from watching the “jerky five-second loop” of Leela spread across multiple computers is “indescribable. Leela, widening her eyes and making a flirtatious ticking-off gesture at the viewer, London’s West End briefly visible in the background” (120). Still further into the novel, the loop is simply “a little pixelated woman and a snatch of screeching violins” (130), and by the novel’s end, it is nothing more than “a tinny blast of Indian music and a depressingly familiar little dancing figure” (240). Kunzru makes a deliberate rhetorical move in limiting both the depth and the frequency of these descriptions over the course of the novel—while the circulatory reach of the Leela-image is global, the image itself is effectively illegible, for both the novel’s characters and its readers. Kunzru frequently turns to the language of technological limitation in these descriptions: the repeated references to pixelation and the “jerky” quality of the footage, the “tinny” sound of music on computer speakers, and perhaps most dramatically the notion of the image itself as “indescribable” in its technologically replicated nature. In their accumulation, these markers of limitation collectively suggest that the seductive image of a young dancing woman becomes a blind for something far less aesthetically comprehensible. Kunzru draws the reader’s attention to the familiar site of the image as a point of aesthetically produced affective and semiotic exchange, only to reroute that attention below the surface of the image, towards the invisible machinery of digital culture: its overwhelming streams of code, its opaque networks, nodes, and pipelines sponsoring the circulation of

information. As Kunzru himself states it at the outset of the novel, the looping video clip of “the girl with the red shoes, cursed to dance on until her feet bled or the screen froze” is ultimately “a surface effect. The real action [is] taking place in the guts of the code . . . an invisible contagion of ones and zeroes. . . . [H]er clinging sari divert[s] attention from the machinery at work under her skin” (4). The minimal descriptions of the Leela image over the course of the text deliver on this initial promise of invisibility, performing it within the text in a manner that mimics the actual effects of the virus: at these moments, Kunzru offer a provocative glimpse of this enigmatic figure, only to “crash” this textual display, returning to the main narrative.

“Gaps that have never been filled”: Network Discontinuity, Catalog Aesthetics and the Form of the Digital

By deliberately employing omission as a formal and rhetorical strategy, Kunzru shifts the focus of the novel from the question of how Bollywood’s melodramatic aesthetics circulates as a metonym for Indian cultural experience within a globalized world to the question of how raw digital information circulates as a means of both catalyzing and foreclosing upon global telecommunication. What does it mean to structure a novel’s narrative around such a multiply layered omission? Kunzru’s gesture brings to the fore not only a generalized kind of absence per se, but moreover a complex process of semantic absenting itself, through which meaning and information are consistently and abruptly secreted away through a technological process of seemingly unbroken continuity. At the level of narrative, the vital material put into circulation by Arjun is not material to be read at all, but rather material that poses a challenge to the

ideas of translatability and legibility altogether, making reading—in any language, from any location, on any platform—impossible. Yet this foreclosure is not a purely abstract linguistic gesture, evacuating communication and leaving nothing in its place. Instead, it is a paradoxically blank communication of the sort described by Rita Raley in her article “Machine Translation and Global English.” Writing of late-twentieth-century culture’s “premium on images that are literally representational, transparent, and universally decodable,” Raley notes that “[e]ven the non-representational, mystificatory, cryptic, and abstract are counter-balanced by a readability, by an absorption into a networked system in which, in a conventional sense of signification, they do not need to mean but function, with and for global capital” (305). Viewed from the perspective of Raley’s formulation, the Leela virus constitutes a mode of writing that is effectively outside of language and meaning, writing that self-reflexively foregrounds its own refusal to be assimilated through its paralysis of language and communication across the web. Through its foreclosure on communication, the virus substitutes the opacity of unmediated function—or, more accurately, unmediated dysfunction—for the transparency of meaning, and thus gestures towards the opacity of its own deep code, the untranslatable operations of data that constitute the conditions of possibility for global communication.

The opacity and untranslatability of the Leela virus, its violent (if unintentional) attack on communicability, stand in stark contrast to the coherence and closure of *Transmission*’s narrative. Kunzru uses this narrative closure, which is all the more notable for its hyperbolic complexity, as a counterpoint against which to stage his representations of the virus’ circulation. Up to this point in my discussion I have focused predominantly on the plotline involving Arjun rather than on those involving the real-life

Leela or Guy and Gabrielle. I offer here a brief encapsulation of the rest of the novel, delivered for the aesthetic effect of narrative density and compression as much as for context: while shooting her latest film in Scotland, Leela faces an onslaught of media attention as a result of the virus and goes into hiding. Meanwhile, Guy travels throughout Europe and the Middle East in a seemingly futile effort to keep his failing branding company afloat, while Gabriella is hired by Leela's managers to spin the virus story. She travels to Scotland, sleeps with Leela's costar, and develops a close personal bond with Leela, who ultimately flees the film location and goes into hiding. Guy's work on a branding proposal for the new EU border patrol fails in a marvelously ironic fashion when, as a result of the "shuffling" action of a variant of the Leela virus that "randomly reassociates database attributes" (263), he is mistaken for an Albanian national illegally seeking asylum in Germany and promptly deported. Arjun, who has been following the media coverage of the virus' spread, is eventually named as a suspect and goes on the run. In an epilogue to the novel, we learn that after helping Leela disappear, Gabriella leaves Guy for a global media magnate, only to die in an apparent suicide. Although Guy eventually finds his way home, he turns his back on the world of transnational capital and becomes a rural recluse. Arjun escapes to Mexico, and the closing lines of the novel suggest that he and Leela are in a romantic relationship, undercover and happily on the lam together.

The novel's epilogue makes clear that its high degree of connection and closure is at least in part hyperbolic, an exaggerated narrative manifestation of the "unlimited power" of mobility and transference described by Kaplan. The circumstances of Arjun's disappearance are the subject of intense, paranoid analysis by groups ranging from the

federal authorities to the mass media to a group of conspiracy theorists who come to be known as “Mehtologists.” Detailing Arjun’s last known movements through a mall near the US-Mexico border, Kunzru writes that

[l]ike the Zapruder footage or the Watergate tapes, the mall’s surveillance record of Arjun Mehta’s seemingly aimless amble from the Timberland store to Starbucks has been pored over, debated, and scrutinized[.] . . . Attention has focused on the \$8.99 yellow-rimmed “Freebird” plastic sunglasses purchased by Mehta during the so-called coffee walk. Their conspicuousness invites speculation that they were some kind of signal. (265)

A similar aura surrounds the belief that Arjun and Leela are together at the novel’s end: “[t]here are sightings of [them] around the world, sometimes alone, sometimes in company. . . . They are sometimes seen kissing or holding hands. According to conspiracy theorists, there is only one possible explanation, only one pattern that makes sense” (275-6), namely a pattern of conventionally satisfying narrative closure in which all can be explained and the guy (or, more precisely, the geek) gets the girl. Kunzru simultaneously sanctions and disavows this conventional pattern through the comic elements of the informational excess that such a closure requires in order to work successfully; indeed, such a narrative strategy appropriates the structuring principles of the global network precisely in order to subvert, exaggerate, and deform them. Through the parodic tones of this excess, Kunzru simultaneously makes visible the impossibility and absurdity of such coherence within a complex global system and implicates readers in a paranoid conspiracy regarding that coherence at the level of literary narrative. In tying things up in such an overly airtight manner, he offers a critical response to both the

traditional rhetoric of the network and the paranoid dimensions of his novelistic predecessors such as Thomas Pynchon and Don DeLillo, writers whose encyclopedic works seek to perform this narrative process of connection as a gesture of political intervention and critique. Pynchon's *Gravity's Rainbow* and DeLillo's *Underworld* both repeatedly state and seek to demonstrate that "everything is connected" in the global system of the late twentieth century.⁷⁴ Kunzru renders this claim deeply suspect, implying that only the completely idealistic and the completely paranoid imagine a necessary pattern, meaning, or message within the connection of everything. In place of the causality within connection sought by novelists such as Pynchon and DeLillo, Kunzru offers the conditions of Grayday, "the period when there was most noise in the global system" as a result of the Leela virus, a time of "appalling losses, drop-outs, crashes and absences of every kind" (253).⁷⁵ In contrast to the conviction of narratives of global closure and connection, "Grayday names a moment of maximal uncertainty, a time of peaking doubt. We have records of events that may not have taken place. Other events took place but left no record. All that can be said with honesty is that afterward there were absences, gaps that have never been filled" (253-4).

⁷⁴ In its descriptions of cyberspace, the epilogue to *Underworld* exemplifies this closure in a manner that *Transmission* parallels particularly closely: "Everything is connected. All human knowledge gathered and linked, hyperlinked, this site leading to that, this fact referenced to that, a keystroke, a mouse-click, a password—world without end, amen. . . . Everything in your computer, the plastic, silicon and mylar, every logical operation and processing function, the memory, the hardware, the software, the ones and zeroes, the triads inside the pixels that form the on-screen image—it all culminates here" (825).

⁷⁵ Kunzru's use of the term Grayday for this day resonates with two other recent events in the world of global digital capital: on February 24, 2004, in an event known as Grey Tuesday, approximately 170 websites hosted *The Grey Album*, DJ Danger Mouse's digital mashup of Jay-Z's *The Black Album* and the Beatles' *The White Album*, as a protest against record industry prosecution for copyright infringement (Grey Tuesday). On February 27, 2007, a day dubbed Grey Tuesday in retrospect, the Chinese stock market dropped nearly 9%, triggering a global decline ("A Wobbly Week"). *Transmission*'s May 2004 publication date suggests that Kunzru's writing of the novel predates both of these real-world events. However, the manifestation of similar issues of the circulation of digital information and currency through global digital networks across these three gray days suggests a characteristic sensibility for such global technological events, in which the momentary destabilization of controlling forces such as authorship, ownership, and communicability figuratively renders the global technosphere the color of ambiguity and interstitiality.

Yet Kunzru's most provocative interrogation of the material circulation of information through the global digital network occurs not in the way in which the uncertainty of *Grayday* makes visible the self-parodic hyperbole of the novel's concluding plot turns but rather in the novel's moments of formal divergence, through which he traces the spread of the Leela virus, juxtaposing linguistic nonfunction against the novel's excessive function at the level of narrative. In these moments, he offers a representation of the movement of information through global digital networks as intensely disconnected and discontinuous, an evocation of the "crashes and absences" of *Grayday* through structures of information that resist assimilation into a larger system of meaning beyond their discrete values. I want to turn now to several of these moments in order to trace how Kunzru registers these informational gaps in *Transmission*'s narrative (and in the novel as a form) through the performance of gaps in form on the page.

Kunzru registers the illegibility and discontinuity of the virus through a series of catalogic formal techniques that diverge from the narrative trajectory of the rest of the novel to represent the virus' global circulation on several technological and social scales. These turns to catalogic form within the novel constitute a complexly and self-consciously hedged consideration of the effectively impossible task of representing digital information as raw material within the space of the text, reflecting on both the narrative structure of his own novel and upon the limitations of the novel more generally as a writing system in dialogue with digital information. Much as the narrative omission of the Leela-image draws attention not only to the absence of that image but also to the irreducibility of absencing itself within the operations of digital technology, Kunzru uses catalogic figures to gesture at the totality of the virus—its underlying code, its processes

of deletion, its global circulation and spread—in a manner that also deliberately (if also intrinsically indirectly) figures the impossibility of comprehensively rendering the entirety of the information that contains this totality. Indeed, textual language cannot rationally reproduce the full scope of the virus as information, nor can it fully fill in the interstices between the discrete units and data points that collectively constitute this information. Thus in using the catalog's deceptive air of comprehensive inclusion in these moments, he incorporates information that necessarily involves only a minute part of the totality of the virus' operations, yet he nonetheless refuses to impose a stable continuity or coherence on that information through narrative. By listing discrete data points—locations, agents, calculations—without articulating any connection between these points, Kunzru offers an appropriative representation of the operations of digital information that invokes those operations in their foundational technological form (precisely the complexity that the approach characterized by Gibson elides) while at the same time consequently acknowledging the impossibility of accurately or fully representing those operations within the form of the print novel.

In one description of the virus' movement, he turns to the encoded language of transmission itself, linguistically tracing the virus through the pipelines of the Internet, “through MAE-West and East, into hubs and rings in Chicago and Atlanta and Dallas and New York, out of others in London and Tokyo, through the vast SEA-ME-WE 3 cable under the Pacific and its siblings on the seabed of the Atlantic” (109). This passage imagines the virus' movement as nonphysical, nonlinear, and multiple, pursuing several pathways simultaneously in a manner unbound by the constraints of material efficiency. Thus at the level of sequencing and event, it becomes difficult to discern how these

multiple pathways—through American “hubs and rings,” through London and Tokyo, across the Pacific and the Atlantic—relate to one another. In registering this condition, Kunzru’s listlike recording of the virus’ movement offers connection without causality or order, replacing this coherence with multiple flows of information that are at once both overlapping and disconnected. Yet for all of this nonlinearity, the relations in the passage are relatively clear in semantic terms. Much of the challenge of parsing the passage takes place instead at the level of coding: in order to comprehend the passage fully, to “see” the movement of the virus within the text, it is necessary either to know or to decode the meanings of the acronyms that bookend the passage. Through these acronyms, Kunzru figures the movement of the virus in terms of a radical compression, echoing his evocation of code in the first lines of the novel. This linguistic gesture imagines a drastic reduction of the scale of global technology, and in doing so it brings to light a certain arbitrariness and unreadability in the underlying structure of that technology: in order to know that “SEA-ME-WE” stands for SouthEast Asia-Middle East-Western Europe, we either need to know the code in play or break it (or, of course, look up the acronym on the web), but that answer itself yields no higher knowledge about the geopolitics of information flow. What criterion could coherently connect the massive span of those three regions other than the cable itself to which Kunzru alludes, and—more importantly—what could make that connection distinctly visible other than the paralyzing movement of a computer virus through that cable? Just as filling in the gaps to trace the pathways of the virus’ circulation (if such a completion is even possible) yields no clearer or more linear a picture of its global impact, Kunzru’s technical references within this list work as a tantalizingly empty form of in-group discourse. They hold out the false

promise that unpacking technologically inflected language will make the technology that that language represents transparent and comprehensible, yet the entity that it signifies for is so broad and generalized as to lose virtually any meaning beyond reference to the cable itself.

Kunzru also represents the transmission of the Leela virus through an eclectic listing of people who click on the email attachment that triggers the virus:

Kelly Degrassi, insomniac, mother, receptionist at the offices of the Holy Mount Zion Church in Fort Scott, Kansas, opens and clicks.

Darren Pinkney (dairy farmer, Ballarat, Australia) clicks.

Altaaf Malik (student, Leela Zahir fan, Hyderabad, India) clicks. (106)

The language in this second passage is comparatively transparent at the surface level, yet its narrative form (or lack thereof) poses a much more explicit and problematic challenge to reading than in the previous passage. Recalling the poem in the novel's prologue in terms of both form and thematics, this passage imagines a "topological curiosity" (Kunzru 4) of information flow that is so multiply and chaotically determined as to be effectively random, impossible to parse in terms of readerly linearity or causality. Kunzru's decontextualized, paratactic listing offers no indication of whether these "characters"—who do not appear in the novel before or after these passing mentions—exist in a chain following the sequence of the text, with each one passing the virus to the next, or in some other disjointed and indirect configuration, with all the characters clicking on the Leela email simultaneously (or in some other order entirely) rather than sequentially. Faced with this unexplained list, we must hover between two possible readings of the passage, opposing extremes that each carry their own set of implications

regarding global technological connectivity and how literature represents that connectivity: either these characters exist “in sequence,” forwarding an email with the Leela virus to one another in a manner that would necessitate some unstated connection over vast global distance, or—precisely the opposite—they have no connection, direct or indirect, beyond being common victims of (and participants in) the random movement of information. As with the gaps between both bits of code and nodes within a network, it is difficult to measure or quantify the gaps between items in this list. On the space of the page, these gaps are at once both regularized and negligible; on the physical space of the map to which they refer, they are arbitrary and irregular in size; as spaces between points along the pathway of the virus as information, their sizes and relations are indeterminate, a condition foregrounded by the directness with which Kunzru lists them. In doing so, he delivers information to be charted and computed, but refuses to take up those processes himself.

In an earlier section of the novel, a set of log information is interspersed within a description of the virus:

Legitimate programs were doing legitimate things. Until they stopped. Until she took over.

Release +3 hrs: 17,360 hosts

Release +4 hrs: 85,598 hosts

Release +5 hrs: 254,217. . . .

So when Arjun appeared at work the next morning, haggard and drawn from a night without sleep, despite the infection raging around the world, not one sample

had come into Virugenix for analysis. Leela was in the wild, and for the moment totally invisible. (108, ellipse in original)

Like the passage listing the computer users who “click” on the Leela attachment and unwittingly further its transmission, this passage offers the blank disjuncture of information in place of clearly articulated connectivity, posing multiple unanswerable questions as to the spread of the virus: what happens between hours three and four, or four and five? What patterns and logarithms (if any) determine the virus’ rates of increase over time? Perhaps most importantly of all, what subsequent data is missing from this abruptly truncated listing? By juxtaposing this log against the mundane events of Arjun’s workday, Kunzru renders the invisibility of the virus through defamiliarizing technical text, with the seizure of the narrative by data precluding a more easily accessible or intelligible description of the virus’ circulation. This technique exemplifies Hayles’ notion of narrative and aesthetic flexibility as predicated upon the restricted meaning inherent in code: “[f]lexibility and the resulting mobilization of narrative ambiguities at a high level depend upon rigidity and precision at a low level. The lower the level, the closer the language comes to the reductive simplicity of ones and zeros, and yet it is precisely the ability to build up from this reductive base that enables high-level literariness to be achieved” (*Mother* 53-54). As the text tends toward the semantic minimalism of discrete data points, these points become increasingly difficult to read as integrated elements within the narrative with any sense of fixity or closure precisely because of their impact upon the events of the narrative. The more the virus spreads over time as recorded in these data points, the more activity takes place in the gaps between data points, outside of the detection or comprehension of either the novel’s readers or the

antivirus computers at Virugenix. The passage of clicking characters produces a similar effect: compared to the complex, overlapping relationships that occupy the bulk of the novel, Kunzru's unembellished list of the virus' victims and transmitters registers as fractured and lacking in connectivity in any sense beyond the technological materiality of immediate, momentary transmission of the virus. The flatness of the "clicks" that ends each line of the list hammers home the opacity and the detachment that hold it together, and in this sense it undoes the exaggerated global eclecticism of the list—the Australian dairy farmer, the insomniac working mother, the obligatory Leela Zahir fan. In these moments of formal divergence, then, Kunzru crashes the function of the novel in an even more dramatic fashion than with the minimal, momentary glimpses of the Leela-image—after all, the truncation of the log file has the effect of an interrupted message itself, and the sound of a computerized "click" can denote system failure as well as activation.

In privileging an aesthetics of transmission, Kunzru diverges from and undermines traditional conceptions of the aesthetics of connection, offering an immanent critique of the catalogic impulse as a means of reckoning with the scale of global networking. This shift resonates with a phenomenon that Brad Evans describes as "circulation with gaps," a process marked by "the pleasures—esthetic, intellectual, and otherwise—that have been associated . . . with cultural elements that pop up on us unawares, again and again, in different contexts, and in ways that appear, somehow, to escape the regimes of circulation regulating our everyday commerce with things" (3). For Evans, this "esthetic delight in the incongruity of multiple iterations" of texts, images, and other "things . . . circulated out of place" (5) derives from "that ephemeral space—that lost time—between the [object's] appearance at point A or point B (as well as from

the space left between items X and Y on the list)” (7). In their production of “gaps that have never been filled,” computer viruses as Kunzru represents them exemplify this process, serving as a sort of *ne plus ultra* case of circulation with gaps. Viruses are nothing if not unpredictably mobile, pursuing pathways that are—if we take Kunzru at his word in relation to these catalogic passages—so far from the regimes of everyday commerce and circulation as to be virtually arbitrary. Indeed, both the “aesthetic delight” of these passages and the theoretical provocation they provide derive from following out their implications to the farthest horizon of Evans’ formulation: what, if anything, exists in the “space left between” the lines, people, and data points in these lists? Can there be any “out of place” in a network so widely distributed as to cover individuals as different as Kelly Degraasi, Darren Pinkney, and Altaaf Malik? What and where would such an “out of place” be? Conversely, the smallness of these catalogs further deepens this critique—how can such a catalog speak to a global scale with only three or four data points? In pushing the concept of network connection and closure to the extreme, Kunzru focuses formal, narrative, and theoretical attention on the gaps that are central to Evans’ model of culture as “what gets transmitted, what circulates” (12).

Yet Kunzru’s novelistic representation of viral circulation raises a number of formal, technical, and ideological questions through which it diverges from Evans’ concept of circulation with gaps. Among other sources, Evans distills this concept from the poems of Walt Whitman, works in which Whitman “delineat[es] connections without really delineating them, with lists that spiral out of control. Whitman leaves the gaps unfilled, and thus configures the connections between himself and his American citizen/comrades as something to be filled in by readers as they moved [sic] between the

lines of his poetry” (8). The innovation of Whitman’s technique is its centrally encyclopedic intent, its attempt to show a comprehensive picture in which the reader produces connection and cohesion. The crucial operative element within this poetics is not the individual listed items but rather the larger structure and “the process of appearing and disappearing . . . in which content is equivalent to iteration” (Evans 7) that produces that partially visible structure. Kunzru’s formal innovation, by contrast, derives from moments of syntactic compression within a narrative that is otherwise encyclopedic (in narrative structure if not necessarily in ideology, as I have suggested above). The microscopic gaps on the page between discrete items within his lists serve to invoke and indeed amplify the scope of the various macroscopic gaps they represent within the global digital network. In the uncontextualized manner in which he incorporates these lists within the flow of the novel, Kunzru at once both leaves these gaps open as “something to be filled in by readers” and suggests the futility of such a project of completion for cultural practice in general as well as for the novel in particular. The virus is clearly and explicitly the connective agent in these moments—and indeed throughout the novel as a whole—but a cohesive picture of the larger structure is inaccessible on two levels. Firstly and most immediately, the virus disrupts the network system, making any larger visualization impossible for the novel’s characters at the level of narrative action and event. At the more specific and local level of literary and technological form, the gaps on the page in these moments stand in not just for arbitrary, incalculable quantities of space and time, but also for processes of viral replication and transmission that operate on a radically different plane of meaning from the plane occupied by the connective imagination of Whitman’s human, organic catalogs (and, moreover, from the plane

occupied by conventional modes of meaning production within literary writing more generally). These processes that move the virus through the web take place at the microscopic level of code, the raw, unassimilable material underside of the global network: the substance that lies between point A and point B on Kunzru's map, between item X and item Y on his list, between release +3 hours and release +4 hours, between Kelly Degrassi in Kansas and Altaaf Malik in Hyderabad, is an unreadable, virtually uncountable string of digital characters assembled for the express purpose of subverting standard structures of connection and relation.

In focusing attention on these gaps through turns to catalogic form, thematizing the ways in which digital information resists readerly assimilation, Kunzru poses a problem of reading and readability specific to the circumstances of digital culture. To return briefly to the relations of code and poststructural language to which I alluded at the beginning of this essay, the problem of reading Kunzru's gaps is not merely a problem of reading "between the lines" or in search of unstated meaning (or of the absence or deferral of such meaning). These gaps stand in not for any manipulation or deflection of meaning as such, but rather for action, accumulation, and diffusion; in Raley's terms, they do not mean but instead function. Thus the blankness of the page in the spaces between items on these lists induces a sort of semantic vertigo precisely because it represents action that effectively escapes and short-circuits rational semantic pathways. Alexander R. Galloway's comment that "[c]ode is the only language that is executable" (150) crystallizes this process. Indeed, the catalogic moments within *Transmission* serve as a mechanical record of the execution of the virus' code as much as they serve to advance the narrative, if not more so. By using catalogic form to intermingle the

“reductive base” of the virus’ code with the “high-level literariness” of the novel’s complexly networked narrative, Kunzru illuminates a multilayered paradox of meaning production within digital culture, in which the complexity and connectivity of the global network (along with Kunzru’s novelistic attempt to represent it) collapses into discrete, discontinuous data points rendered in a non-narrative list, which are themselves dependent upon and reducible to the even more discontinuous ones and zeros of binary code.

From “Faulty Representations” to Representational Failure: Destructive Creativity and Digital Reading

Using Evans’ model to consider how Kunzru problematizes catalogic and narrative writing in response to digital technology reveals another tension produced by the virus’ central role in the form and narrative of the novel. As I have noted above, Evans theorizes circulation with gaps in terms of aesthetic pleasure, finding it in particular in the movement of the image of a black cat within the lived cultural world of Parisian cabarets and ephemeral literary journals in the 1890s. Although he emphasizes the “structural continuity between experiences of circulation” over their comparative levels of “ideological urgency” (6)—and although he nonetheless makes a compelling case for the ideological implications of the black cat’s circulation—the centrality of the circulation of the virus in *Transmission* necessarily raises a complex set of ideological and ethical questions. How are we to imagine the ethics of network circulation—as well as the ethics of literary engagement with this crucial issue—when the virus and Kunzru’s formal evocation of its ruptures produce aesthetic pleasure of the sort Evans describes?

The ethical problems posed by the virus extend beyond the initial issues of the reader's complicity in identifying with Arjun as an antihero, an everyman of global capital mistaken for a rogue cyberterrorist. They present themselves through paradox at the level of the fabric of the text and our experience of reading it. The generative force of the novel—the operant agent that makes possible the text's narrative structure, its development, and its most distinctive aesthetic effects—is also a profoundly destructive force at the levels of narrative and information, throwing the narrative into chaos and disconnection and presenting itself to us as readers through the relative obscurity of raw data. This internal tension problematizes the possibility of any ethical claim or critical purchase in relation to the geopolitical and technological situation the novel addresses. The gaps of the virus' circulation are gaps of foreclosure as well as of movement; in taking pleasure in these gaps, we necessarily take pleasure in the devastating, literally deleterious paralysis the virus imposes upon the entirety of the web, the indiscriminate loss of continuity, and, moreover, of accessible information itself, that we both witness and experience on the page.

In this sense, then, Kunzru presents a textual performance of the “destructive creation” that Alan Liu considers to be the “new sublime” and the “most extreme verge” of “new media aesthetics.” For Liu, destructive creation—or, as he refers to it more frequently, destructive creativity—is “the critical inverse of the mainstream ideology of creative destruction” by which global capital perpetuates and extends itself (324-325). He traces the roots of destructive creativity to the auto-iconoclasm of the twentieth-century avant-garde, and finds its logical extreme in the aesthetics of the viral, which he describes as “a destructivity that attacks knowledge work through technologies and techniques

internal to such work. The genius of contemporary viral aesthetics is to introject destructivity within informationalism” (331).

Kunzru’s narrative of a virus that destroys the circulatory capacity of the web by exploiting that same capacity shares the structural elements of Liu’s model, yet resists its recourse to broader ideological intentionality. The exemplars of destructive creativity that Liu discusses are digital artists and activists passionately committed to a radical left politics, whereas Arjun is simply a cubicle drone in crisis, a worker trying to retain his livelihood within the global digital economy. Of course, at one level, this position makes him the purest incarnation of the engaged knowledge work that Liu calls for in his critical study. Stripped of political abstraction or generalization, Arjun’s actions employ destructive creativity in a manner that is focused and conscious in order to enact localized, practical change. Yet at the same time, he exhibits less direct agency than almost anyone or anything else in the novel, including and especially the Leela virus itself. Destruction is a means for him as opposed to an aesthetic end; ironically, it is an attempt to remain productive within the system of global digital capital rather than deliberately to critique or destroy that system as such.

What, then, is creative about the destruction of the Leela virus in and of itself? Here the difference in implication between the virus and Evans’ black cat becomes an urgently relevant criterion, as the paradoxical status of the virus within the novel makes it necessary to consider it in terms of both pleasure and destruction. If, as Evans’ model suggests, the act of tracing the destruction of the virus through the unreadable gaps of its circulation produces a kind of pleasure, and if that destruction has no overarchingly intentional human agent within the bounds of the text, what larger end result emerges

from the impact of the virus? Liu, in his discussion of destructive creativity, makes a strong case for the powerful critical purchase that art attains by taking on a viral form—in what ways might a virus conversely be artistic or communicative? Viewed through this lens, Kunzru's novel shares common ground with Warhol's *a* in its attention to and predication upon this “extreme verge” of the digital. Both authors bring the internally destructive capacities of the domains of informationalism they consider to light in a way that also reveals their inner operating protocols: much as the disruptions and errors of *a* served to set the writing system of the office typing pool into relief, tracing a critical outline of its vectors of power and information, Kunzru's attempts to trace the composition and destructive movement of the Leela virus similarly gesture at the shape of the global digital network through which the virus circulates, revealing as much about this network through its inevitable failure to represent it fully as through the attempt itself. In order to pursue further the possibilities suggested by Kunzru's deliberately failed tracing of the global network and the digital information that circulates through it, I want to turn away from *Transmission* itself to consider briefly the ways in which critical readings of global capital and of the literature of global capital have generally understood the cultural representation of technology. I will suggest through this consideration that the aesthetics of transmission that Kunzru presents offers one response to the critical blind spot present in these readings.

Fredric Jameson's *Postmodernism, or, the Cultural Logic of Late Capitalism* is a cornerstone text for such considerations of technology and the representation of technology within global capital. Jameson's approach to these issues is highly vexed, an attitude exemplified by his discussion of cyberpunk literature. Jameson's consideration of

cyberpunk both endorses its status as a crucial interrogation of contemporary technology and undermines it in a manner that effectively absents technology as a material entity from the critical field he outlines, because of its centrality to that field rather than in spite of it; in this sense, Jameson champions Gibson as a cyberpunk author for precisely the aesthetic elisions I critiqued earlier in this chapter, performing those elisions in turn in his own work. Mention of cyberpunk is all but absent from the body of Jameson's text, yet he takes its very first footnote as "the place to regret the absence from this book of a chapter on cyberpunk, henceforth, for many of us, the supreme *literary* expression if not of postmodernism, then of late capitalism itself" (419n1, emphasis original). Cyberpunk is at once somehow both conspicuous within and conspicuously absent from the otherwise capacious scope of Jameson's analysis. His conflicted situation of this genre as a crucial location within the uneven landscape of postmodern cultural forms opens the door to a sequence of evaluative transpositions that effectively removes technology per se from view:

Our faulty representations of some immense communicational and computer network are themselves but a distorted figuration of something even deeper, namely, the whole world system of a present-day multinational capitalism. The technology of contemporary society is therefore mesmerizing and fascinating not so much in its own right but because it seems to offer some privileged representational shorthand for grasping a network of power and control even more difficult for our minds and imaginations to grasp: the whole new decentered network of the third stage of capital itself. (37-38)

Jameson shifts from the concrete object of the “communicational and computer network” to the conceptual figuration of the network as the structure of late capital. In this analysis, the computer network—whether as represented in aesthetic production or, it would seem, as an object in and of itself—is at once both everywhere and nowhere within the realm of critical interrogation, subject to the same paradoxical condition as cyberpunk literature itself within Jameson’s study. It is never, or perhaps never just, the network, but instead must always stand in as “representational shorthand” for something else, namely the abstracted structures of capital.⁷⁶ Viewed from this perspective, digital communication technology becomes a synecdochal figure for the world system rather than an irreducible dimension within it.

Literary responses to this technology follow an analogous path in Jameson’s eyes. He describes Gibson’s “representational innovations” as “an exceptional literary realization within a predominantly visual or aural postmodernism” (38), juxtaposing Gibson’s imaginative rendering of new technology through visual metaphor with the visuality that characterizes postmodern culture in other contexts. In this sense, cyberpunk as typified by Gibson’s work succeeds precisely to the extent that it is a “faulty,” mediating “shorthand,” acknowledging the complexity of digital technology and then at once both registering and seemingly assimilating it by conceptualizing the digital as a series of easily accessible and communicable images, and thus in terms other than those most native to the digital. I do not take issue with Jameson’s conceptualization of

⁷⁶ Jameson’s higher-order abstraction here is a case of a technosocial problem aptly described by Bruno Latour: “[w]hen the social realm is given such an infamous role, great is the temptation to overreact and to turn matter into a mere intermediary faithfully ‘transporting’ or ‘reflecting’ society’s agency. . . . To avoid the threat of ‘technical determinism,’ it is tempting to defend adamantly ‘social determinism,’ which in turn becomes so extreme ‘the steam engine becoming, for instance, the ‘mere reflection’ of ‘English capitalism’) that even the most open-minded engineer becomes a fierce technical determinist bumping the table with virile exclamations about the ‘weight of material constraints’” (84).

postmodern culture as primarily visual, nor with his attention to the visual orientation of the formal characteristics of cyberpunk. However, I do maintain that he theorizes a critical response to technology and the literature of that technology that transposes it into the realm of the visual and the metaphorical, and that a critical response predicated upon such an approach loses a certain amount of engagement and efficacy. Rather than being a convenient metaphor for the complexity of subjective experience within “postmodern hyperspace” (Jameson 44), the structures of digital networking and transmission are a component of that space and that experience, a strangely fractal dimension that is within the “real” world, but not quite of it.

Reading Jameson critically from this perspective, then, shows the need to consider digital technology at the material level within both literary and critical productions, in terms of both the “immense . . . network” and the minute digits that circulate through it. I have suggested in my reading of *Transmission* that the possibility for such consideration becomes most immediately present and practicable at moments in which the digital system actively works against its own limits—in the case of *Transmission* in particular, moments when the force of the Leela virus upsets both the narrative world of the novel and the novel’s own modes of meaning production.⁷⁷ Yet how might it be possible to carry out this critical practice more regularly and systematically, assessing the material instabilities of the digital landscape at will rather

⁷⁷ Steven Johnson’s *The Ghost Map* makes a similar argument in relation to a different historical context. Johnson’s text explores the London cholera epidemic of 1854 and the conceptual advances in mapping the spread of disease that eventually made it possible to stem the outbreak. He describes the titular map, which allowed scientists and doctors to trace paths of contagion accurately for the first time, as “a brilliant work of information design and epidemiology, no doubt. But it is also an emblem of a certain kind of community—the densely intertwined lives of a metropolitan neighborhood—an emblem that, paradoxically, was made possible by a savage attack on that community” (198).

than waiting for the news produced in moments of crisis? How might both novelists and critics interrogate technology more closely and more regularly?

Hayles offers one promising possibility in her consideration of “what would count as signifier and signified” “[i]n the context of code:”

Given the importance of the binary base, I suggest that the signifiers be considered as voltages . . . [.]. The signifieds are then the interpretations that other layers of code give these voltages. Programming languages operating at higher levels translate this basic mechanic level of signification into commands that more closely resemble natural language. The translation from binary code into high-level languages, and from high-level languages back into binary code, must happen every time commands are compiled or interpreted, for voltages and the bit stream formed from them are all the machine can understand. . . . Thus voltages at the machine level function as signifiers for a higher level that interprets them, and these interpretations become signifiers for a still higher level interfacing with them. Hence the different levels of code consist of interlocking chains of signifiers and signifieds, with signifieds on one level becoming signifiers on another. (*Mother* 45).

Hayles’ suggestion engages directly with the material underpinnings of digital communication, offering a compelling model for thinking the close relations between the invisible changes in voltage that take place at the level of the circuit board and the evident changes in content and action on the screen that we commonly understand as the meaning-making work of computers and of digital technology more generally. In making clear how information moves from such voltage impulses to the space of the screen, her

account of “interlocking chains of signifiers and signifieds” imagines a useful sort of informational genealogy for digital culture. Yet she gives only passing mention to the opposite direction of meaning production, namely the process of signification “from high-level languages back into binary code.” In this latter process, the roles of signifier and signified Hayles outlines are reversed: human input at the level of “natural language” on the screen and keyboard is the initial signifier, producing a signified at the next lowest level of complexity, which then becomes the signifier for the next level down, all the way to the voltages that are in this case the final signified. Thus while Hayles’ choice of the scale at which to observe the processes of digital meaning production is extremely valuable, she nonetheless privileges a model based on reception and reading, with information flowing from the inside of the computer to the surface of the screen. Within such a “bottom-upward” trajectory, the materiality of code is a precondition and an afterthought, but rarely an object of representation or inquiry in and of itself. In order to allow for a full critical understanding of digital communication, such a model must equally emphasize the opposite, “top-down” direction; it must make room for practices that signify for digits, reaching from action on the keyboard and screen to the voltages within the computer that make the transmission of such action possible. The act of signifying for code as well as through it, as Kunzru attempts to do in *Transmission*, opens for literary production a point of entry towards a more engaged and closely concentrated consideration of digital technology. As the limitations of Kunzru’s language in variously articulating the scope, compaction, discontinuity, and dissemination of digital information suggest, such an attempt can never fully succeed within the bounds of conventional print literature. Yet it is precisely in running up against these failures as

Kunzru does, registering the irreducible differences between the writing systems of the novel on one hand and the bit and the network on the other, that a more richly and complexly nuanced picture of the relations between these systems becomes possible, accounting for connective relays and convergences as well as discontinuities.

Drawing on the “extraordinary linguistic innovations” (44) of Michael Herr’s Vietnam narrative *Dispatches*, Jameson proposes the helicopter as characteristic icon of postmodernity, claiming that “[i]n this new machine, which does not, like the older modernist machinery of the locomotive or the airplane, represent motion, but which can only be represented *in motion*, something of the mystery of the new postmodernist space is concentrated” (45, emphasis original). Given the importance of digital structures to postmodernity and postmodern space—and, increasingly, to the space and condition of contemporary globalization—perhaps these voltages and bits are a more fitting figure for the contemporary moment. As the microscopic bare essentials that make up the global system, they carry essential meaning, yet they do not present that meaning to untrained eyes. Their relationship to the literary is similarly conflicted: if Kunzru’s formal strategies are any indication, these signifieds require wholly new mobilizations of language to be represented at all, whether in motion or not, and then perhaps only in moments of immanent invisibility and inaccessibility.

Thinking about this mode of signification as the emblem of global digital capital entails a shift on multiple levels: in the scale at which digital activity is perceived and culturally interpreted, in the aesthetic strategies of novelists in relation to digital technology, and in the approach of critics who seek to remain sensitive to both the subtleties and the broad strokes of this technology as well as to how it impacts print

writing. In suggesting such shifts, I do not mean to suggest that we need to be able to understand voltages, or binary code, or the routing paths of network transmission, any more than Jameson's model implies that we need to become helicopter pilots or mechanics. After all, as Hayles notes, "like esoteric theoretical writing, code is intelligible only to a specialized community of experts who understand its complexities and can read and write it with fluency" (*Mother* 51), and critical engagement with this field need not be wholly fluent to be effective and illuminating, but rather perhaps only conversant. I am, however, suggesting a shift with regard to how to approach this field, one that Kunzru figures through his representations of both code and network as circulatory entities in *Transmission*. In order to think technology and the literary response to technology effectively amidst the digital moment, we need to think that technology closely and materially, reckoning critically, just as Kunzru does, with both its immediacy and its inaccessibility.

The microscopic impulses at the foundation of the digital that I have traced through Kunzru's novel are, by the same token, an extreme manifestation of the sensorially imperceptible and thus often critically overlooked elements of information technology that have constituted much of the primary material of study for this dissertation and the texts it discusses: viewed in this context, the ones and zeros of binary code as Kunzru gestures to them might take their place alongside the arbitrary character spacings of Warhol's networked typewriter, the isolated frames of DeLillo's lost and found films, and the multiply replayed grooves and sides of Young's imaginary records. In seizing on these elements as literary subjects and devices—making them aesthetically and culturally visible, setting them within a larger imaginative world, and ultimately

shaping representational practices in their images—these authors imagine media technology as a crucial, literally fundamental component of the rich aesthetic and political imagination of contemporary print literature.

Playing Back Nietzsche's Laundry List: Digital Print Literature

In the preceding chapters, I have traced the ways in which a series of contemporary authors have used literary form and structure to register and imaginatively appropriate the distinctive operating procedures of various information technologies. In doing so, I have argued for the importance of attending to the zones of convergence as well as the zones of incompatibility that these attempts at appropriation bring into view, the moments where the parameters of print writing can approximate or represent those of the technology in question as well as the moments where writing fails or stops short of such dialogue, whether willingly or unwillingly. Given the broad, overlapping landscape of valences and dynamics across which these dialogues take place (and/or fail to do so), this critical utility applies to both literary and media studies in equal measures. Just as the ways in which these authors renovate literary form through their engagement with other media technologies poses new directions for literary production and literary study, the dynamics of those media technologies that they reveal on both micro- and macroscopic levels lend valuable new perspective to media studies.

In closing this project, I want to turn to a new technology that illustrates these premises from the opposite direction, a piece of computer software that might be provocatively used to produce, supplement, and hybridize a new form of print literature. TypeTrace, a piece of software art developed by the Japanese collective DivvyDual, consists of a window dominated by a pane into which the user types text in the manner of any standard word processing program. Accompanying this pane is a single row of buttons: while some of these buttons allow the user to manipulate text in the main pane through various fonts and effects similar to standard word processing, others pertain to

TypeTrace's distinctive, unique functions—these buttons allow the user to record and playback the keystrokes entered in the main pane. Through these options, TypeTrace makes it possible to capture a given act of typing and replay it in real time, providing a moving transcript of a computer user's writing session. This transcript in motion is complete with all of the disruptions that are effectively excised from the finished product of the print document (or the digital file, for that matter). Typos, misspellings, deletions, rewritings, and delays all become part of the finished text in this moving form, playing out over the timespan of production. The members of DivvyDual have disseminated TypeTrace in several different contexts: as a piece of software art, it is available online to download free for private use, allowing anyone who wishes to write and circulate documents in TypeTrace form to be played back by anyone else with a copy of the software. The developers have also shown it in a gallery environment, projected on a blank wall and hooked up to a mechanized keyboard that itself plays back keystrokes as they are registered in the file being played, giving the work in progress a player-piano-like mark of the author by way of both presence and absence. In a gesture that shrewdly mixes efforts at financial self-sufficiency with a critique of the corporate sphere of knowledge work, they have also marketed TypeTrace to corporations as a technology for transcription and employee monitoring (TypeTrace Exhibition).

In all of these contexts, writing at once both replays the processes I have traced across this dissertation and short-circuits them: rather than appropriating the operating conditions of another media technology, writing in TypeTrace serves to produce a record of its own always already material and technological process. Within a digital environment, this process takes a hybrid form that builds upon the foundations of

multiple information technologies: for example, the errors and discontinuities of typewriting that Warhol's *a* captures on the surface of the page become present and visible within a TypeTrace document because of their internalization within the digital computer rather than in spite of it, resulting in a material text that represents the textual mutability of a digital file in a fixed, set form. Depending upon the context in which it is deployed, the program sets in play a mode of writing somewhere between (self-) surveillance and what DivvyDual member Dominic Chen describes as myware, technology that amasses the footprint of a user's digital activity and circulates it for (ostensible) purposes of artistic production and social interaction rather than control or cooptation.

TypeTrace's recording capabilities raise the image of an archival fantasy of the sort posed by Michel Foucault in his consideration of the dually "theoretical and technical" problem of defining the bounds of an author's work:

When undertaking the publication of Nietzsche's works, for example, where should one stop? Surely everything must be published, but what is "everything"? Everything that Nietzsche himself published, certainly. And what about the rough drafts for his works? Obviously. The plans for his aphorisms? Yes. The deleted passages and the notes at the bottom of the page? Yes. What if, within a workbook filled with aphorisms, one finds a reference, the notation of a meeting or of an address, or a laundry list: Is it a work, or not? Why not? And so on, ad infinitum. (103-104)

For Kittler, the thinker with whose media-theoretical program I have been most consistently in dialogue over the course of this dissertation, Foucault's conception of

authorship is a dead end in the age of modern media: the operative question is not “[w]hat difference does it make who is speaking?” (Foucault 120), but rather *what* is speaking—what technologies, what modes of inscription. For Kittler, “Foucault, the last historian or first archeologist, merely had to look things up. The suspicion that all power emanates from and returns to archives could be brilliantly confirmed. . . . It is for this reason that all his analyses end immediately before that point in time at which other media penetrated the library’s stacks. Discourse analysis cannot be applied to sound archives or towers of film rolls” (5). Nor, it would seem, to any of the other nonalphabetic media forms that appear over the course of this dissertation—even the typewriter, perhaps the last writing system in the conventional sense of the term, distributes the writing body in ways that escape the analysis that Kittler (admittedly reductively) attributes to Foucault as “look[ing] things up.” Yet the authors I have discussed in this project acknowledge precisely this boundary around print textual production as their point of departure. In probing and testing it, distorting and reconfiguring it without full transgression into the domain of another information technology, they seek something crucially different from a discourse analysis of “towers of film rolls,” circumventing that project in favor of a reverse engineering of contemporary literature from out of the contemporary media landscape.

Viewed against the recording capabilities of TypeTrace, their expansion of literature’s operating parameters as an information technology begs the possibility of extending Foucault’s speculations quoted above: what if Nietzsche, or for that matter any of these authors, used TypeTrace as their primary means of writing? What if every work of print literature were also published as a TypeTrace file? How do the material and

political conditions of literary textuality change when any novelist uses TypeTrace, as some indeed already have? How do the horizons of possibility implicit in Foucault's rhetorical questions (as well as in Kittler's rejection of their premises) change?

TypeTrace takes up Foucault's speculations in the extreme: when a text is played back, for example what kind of authorial work is marked by a pause of five minutes, or five hours, or even five weeks? When such pauses might mark contemplation, sleep, or system failure, what meanings might we assign to them, and how? How, ultimately, would such technologically recorded units of meaning change the fabric of a literary work? By making possible a "data mining approach" to writing (Chen), TypeTrace makes the granularity of written information visible in a fashion that produces and retains a newly multilayered archive for literature, encompassing material and technological "processes that are not visible at the final state" but rather "can only be seen when playing back" (Chen). Such an expansion, then, might make visible the Nietzschean laundry list that otherwise remains perpetually latent in its eventual erasure and absence within the published text.

Of course, the completism promised in such an expansion of recording capacity is an unattainable dream of the infinite, a Borgesian fantasy asymptotically approaching pure encyclopedism but never able to reach it. No technology can deliver completely upon such a fantastical promise. Yet in utilizing digital technology to open the domain of print literature along a diachronic axis, TypeTrace simultaneously opens it to the possibility of "another style of literature . . . where you can insert [alternate] plot or metafiction inside a novel . . . that is only visible through the timeline, not [in the] static state" of print output (Chen). While such a potential literature leverages digital

technology in order to produce a certain kind of nonlinear multiplicity, this multiplicity is dramatically different from the hypertextual forms of conventional electronic literature, which George Landow describes as “text composed of blocks of text—what Barthes terms a *lexia*—and the electronic links that join them,” housed on a computer or a network of computers (4). On the contrary, rather than blocking and linking information in this fashion, “TypeTrace literature” intervenes within the process of creating and disseminating print writing through digital means, and in doing so it consequently acknowledges print writing’s own system of production within the current digital moment and within the larger media landscape more generally. Hayles suggests that although not all contemporary novels explicitly consider media technology at the thematic or formal level, “[e]ven narratives without this focus can hardly avoid the rippling effects of informatics.” “[w]ith the exception of a handful of fine letterpress books, every book produced in the United States and Europe [in present day] will have been an electronic document in at least one and probably many stages of its existence. . . . [D]espite its traditional physical appearance and conventional narrative techniques, the literary corpus is riven by the writing technologies that produced it” (*Posthuman* 30, *Mother* 117-119). The possibility of TypeTrace literature, then, foregrounds this technicity, incorporating into the material object of the print text a record of its digital condition, yet without rendering it as wholly and only digital. Such an expansion of contemporary writing demonstrates the ways in which it might be always already at least partially digital—just as it might be or might have previously been partially typographic, cinematic, or phonographic—in dynamic and uncanny ways that offer glimpses of the densely and complexly overlapping landscape of media technology. In foregrounding

literature's materially mediated status, then, claiming it as a point of departure for aesthetic and sociopolitical revisions, both TypeTrace and the texts I have discussed in this project collectively emphasize the emergent importance of considering the media-technological process of information management as central to the operations of contemporary writing, both for developing a counternarrative to conventional literary techniques and, more broadly and importantly, for developing a complex, critical understanding of literary production in an age of media technology.

Bibliography

- “a.” Rev. of *a: a novel*, by Andy Warhol. *New Yorker* 4 January 1969: 82.
- Acland, Charles R. “Introduction: Residual Media.” *Residual Media*. Ed. Acland. Minneapolis: U of Minnesota P, 2007. xiii-xxvii.
- Amrute, Sareeta. “The Time-Space of IT Labor.” Unpublished essay. 10 February 2007.
- “Andy Warhol’s *a*.” *American Poetry Review* (March-April 1978): 45.
- Austen, Jane. *Pride and Prejudice*. New York: Cambridge UP, 2006.
- “A Wobbly Week in the Financial Markets.” *The Economist*. 1 March 2007. 1 June 2007. <http://www.economist.com/finance/displaystory.cfm?story_id=8787486>.
- Bakhtin, Mikhail M. *The Dialogic Imagination: Four Essays*. Ed. Michael Holquist. Trans. Caryl Emerson and Michael Holquist. Austin: U of Texas P, 1981.
- Baudrillard, Jean. “Requiem for the Media.” 1972. Wardrip-Fruin and Montfort 277-288.
- Bazin, André. “In Defense of Mixed Cinema.” McKeon, *Theory* 719-732.
- . “Pastiche et postiche, ou le néant pour une moustache.” 1945. *Qu’est-ce que le cinéma? Volume I*. Paris: Éditions du Cerf, 1958. 91-95.
- Beauman, Sally. “*a: a Novel*.” Rev. of *a: a novel*, by Andy Warhol. *New York Times Book Review* 12 January 1969: 32.
- Beeching, Wilfred A. *Century of the Typewriter*. New York: St. Martin’s, 1974.
- Benjamin, Walter. “Theses on the Philosophy of History.” *Illuminations*. Ed. Hannah Arendt. Trans. Harry Zohn. New York: Schocken, 1968. 253-264.
- . “The Work of Art in the Age of Mechanical Reproduction.” *Illuminations*. 217-252.
- Bockris, Victor. “*a: A Glossary*.” Afterword. *a: a novel*. By Warhol. New York: Grove, 1998. 453-458.
- . “Andy Warhol the Writer.” *Who is Andy Warhol?* Ed. Colin McCabe with Mark Francis and Peter Wollen. London: British Film Institute, 1997. 17-21.
- Bolter, Jay David. *Writing Space*. Mahwah, NJ: Lawrence Erlbaum Associates, 2001.
- Bolter, Jay David and Richard Grusin. *Remediation: Understanding New Media*. Cambridge: MIT P, 1999.

- Bosanquet, Theodora. *Henry James at Work*. Ann Arbor: U of Michigan P, 2006.
- Bukatman, Scott. *Terminal Identity: The Virtual Subject in Postmodern Science Fiction*. Durham: Duke UP, 1993.
- Cantor, Paul A. "Adolf, We Hardly Knew You." Lentricchia, *New Essays* 39-62.
- Carroll, Paul. "What's a Warhol?" 1969. Pratt 42-57.
- Chaplin, Charlie. *My Autobiography*. New York: Simon and Schuster, 1964.
- Chen, Dominic. Personal Interview. 18 March 2008.
- Cherci Usai, Paolo. *The Death of Cinema: History, Cultural Memory, and the Digital Dark Age*. London: British Film Institute, 2001.
- Chiappini, Rudy, ed. *Jean-Michel Basquiat*. Lugano: Museo d'Arte Moderna della Città di Lugano, 2005.
- Corrigan, Timothy. "Immediate History: Videotape Interventions and Narrative Film." *The Image in Dispute: Art and Cinema in the Age of Photography*. Ed. Dudley Andrew. Austin: U of Texas P, 1997. 309-328.
- Cubitt, Sean. *The Cinema Effect*. Cambridge: MIT P, 2004.
- Danto, Arthur C. "Andy Warhol." *The Nation* 248 (1989): 458-461.
- Darke, Chris. *Light Readings: Film Criticism and Screen Arts*. London: Wallflower, 2000.
- Darlington, George M. *Office Management*. New York: Ronald, 1942.
- Davies, Margery W. *Woman's Place Is at the Typewriter: Office Work and Office Workers 1870-1930*. Philadelphia: Temple UP, 1982.
- DeKoven, Marianne. *Utopia Limited: The Sixties and the Emergence of the Postmodern*. Durham: Duke UP, 2004.
- Deleuze, Gilles. *Cinema 2: The Time-Image*. Trans. Hugh Tomlinson and Robert Galeta. Minneapolis: U of Minnesota P, 1989.
- Delgado, Alan. *The Enormous File: A Social History of the Office*. London: John Murray, 1979.
- DeLillo, Don. *Americana*. 1971. New York: Penguin, 1989.

- . *Running Dog*. 1978. New York: Vintage Contemporaries, 1989.
- . "Running Dog: Ms. Typesetter's Copy." Folder 57.5. Don DeLillo Papers, U of Texas at Austin.
- . "Running Dog: Notebook." ms. Folder 55.6. Don DeLillo Papers, U of Texas at Austin.
- . "Running Dog: Research Materials." Folder 55.6. Don DeLillo Papers, U of Texas at Austin.
- . "Running Dog: Typescript Draft." Folder 56.1. Don DeLillo Papers, U of Texas at Austin.
- . "Running Dog: Typescript with Handwritten Notes." Folder 55.7. Don DeLillo Papers, U of Texas at Austin.
- . "The Art of Fiction No. 135." Interview with Adam Begley. *The Paris Review* 128 (1993): 274-306.
- . *Underworld*. New York: Charles Scribner's Sons, 1997.
- . *White Noise*. New York: Penguin, 1985.
- DeLoca, Cornelius E. and Samuel Jay Kalow. *The Romance Division . . . A Different Side of IBM*. New York: Vantage, 1991.
- Derrida, Jacques and Bernard Stiegler. *Echographies of Television: Filmed Interviews*. Trans. Jennifer Bajorek. Cambridge, England: Blackwell, 2002.
- Dos Passos, John. *U.S.A.* 1938. New York: Library of America, 1996.
- Douglass, Frederick. *Narrative of the Life of Frederick Douglass, an American Slave, Written by Himself*. New Haven: Yale UP, 2001.
- Doyle, Jennifer, Jonathan Flatley, and José Esteban Muñoz, eds. *Pop Out: Queer Warhol*. Durham: Duke UP, 1996.
- Duvall, John N. "The (Super)Marketplace of Images: Television as Unmediated Mediation in DeLillo's *White Noise*." *Arizona Quarterly* 50.3 (1994): 127-153.
- Dworkin, Craig. *Reading the Illegible*. Chicago: Northwestern UP, 2003.
- . "Whereof One Cannot Speak." *Grey Room* 21 (2005): 46-69.

- Edwards, Brent Hayes. "Louis Armstrong and the Syntax of Scat." *Critical Inquiry* 28.3 (Spring 2002): 618-649.
- . "The Seemingly Eclipsed Window of Form: James Weldon Johnson's Prefaces." *The Jazz Cadence of American Culture*. Ed. Robert G. O'Meally. New York: Columbia UP, 1998. 580-601.
- Eisenberg, Evan. *The Recording Angel: Explorations in Phonography*. New York: McGraw-Hill, 1987.
- Eliot, T.S. "The Waste Land." *"The Waste Land" and Other Writings*. New York: Random House, 2002. 38-56.
- Ellison, Ralph. *Invisible Man*. 1947. New York: Vintage International, 1995.
- Enzensberger, Hans Magnus. "Constituents of a Theory of the Media." Wardrip-Fruin and Montfort. 259-276.
- Evans, Brad. "Vogue and Ephemera: Scenes of Circulation in the Little Magazines of the 1890s." Unpublished essay. 26 November 2006.
- Fleissner, Jennifer L. "Dictation Anxiety: The Stenographer's Stake in *Dracula*." Price and Thurschwell, *Literary Secretaries/Secretarial Culture* 63-90.
- Foucault, Michel. "What Is an Author?" *The Foucault Reader*. Ed. Paul Rabinow. New York: Pantheon, 1984. 101-120.
- Frow, John. *Marxism and Literary History*. Cambridge: Harvard UP, 1986.
- . "The Last Things Before the Last: Notes on *White Noise*." *Introducing Don DeLillo*. Ed. Frank Lentricchia. Durham: Duke UP, 1991. 175-191.
- Gallo, Rubén. *Mexican Modernity: The Avant-Garde and the Technological Revolution*. Cambridge: MIT P, 2005.
- Galloway, Alexander. *Protocol: How Control Exists After Decentralization*. Cambridge: MIT P, 2004.
- Gantz, Carrol M. *Design Chronicles: Significant Mass-Produced Designs of the Twentieth Century*. Atglen, PA: Schiffer, 2005.
- Gates, Henry Louis, Jr. *The Signifying Monkey: A Theory of Afro-American Literary Criticism*. New York: Oxford UP, 1988.
- Geldzahler, Henry. "Art: From Subways to SoHo, Jean-Michel Basquiat." 1983. Chiappini 33-48.

- Genette, Gerard. *Paratexts: Thresholds of Interpretation*. New York: Cambridge UP, 1997.
- Gibson, William. *Neuromancer*. New York: Ace, 1984.
- . "Since 1948." 6 Nov 2002. *William Gibson—Official Website*. 14 June 2007. <<http://williamgibsonbooks.com/source/source.asp>>.
- Ginsberg, Allen. *Howl and Other Poems*. 1956. San Francisco: City Lights, 2006.
- Gitelman, Lisa. *Scripts, Grooves, and Writing Machines: Representing Technology in the Edison Era*. Stanford: Stanford UP, 1999.
- Grey Tuesday*. 15 July 2007. Greytuesday.org. 15 July 2007. <<http://www.greytuesday.org>>.
- Gunning, Tom. "An Aesthetic of Astonishment: Early Film and the (In)Credulous Spectator." 1989. *Film Theory and Criticism: Introductory Readings*. Ed Leo Braudy and Marshall Cohen. New York: Oxford UP, 1999. 818-832.
- Habib, André. "Ruin, Archive, and the Time of Cinema: Peter Delpout's *Lyrical Nitrate*." *SubStance* 35.2 (2006) 120-139.
- Hansen, Mark B. N. *New Philosophy for a New Media*. Cambridge: MIT P, 2004.
- Haraway, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge, 1991. 149-181.
- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: U of Chicago P, 1999.
- . *My Mother Was a Computer: Digital Subjects and Literary Texts*. Chicago: U of Chicago P, 2005.
- . *Writing Machines*. Cambridge: MIT P, 2002.
- Hedstrom, Margaret L. "Beyond feminisation: Clerical Workers in the United States from the 1920s through the 1960s." *The White-Blouse Revolution: Female Office Workers since 1870*. Ed. Gregory Anderson. Manchester: Manchester UP, 1988. 143-169.
- Hitler, a Film from Germany*. Dir Hans-Jürgen Syberberg. Westdeutscher Rundfunk, 1978.

- Hoffeld, Jeffrey. "Word Hunger: Basquiat and Leonardo." Chiappini 87-100.
- Hutcheon, Linda. *A Poetics of Postmodernism: History, Theory, Fiction*. New York: Routledge, 1988.
- Huyssen, Andreas. *After the Great Divide: Modernism, Mass Culture, Postmodernism*. Bloomington: Indiana UP, 1986.
- Jameson, Fredric. *Postmodernism, or The Cultural Logic of Late Capitalism*. 1991. Durham: Duke UP, 2001.
- Johnson, Steven. *The Ghost Map: The Story of London's Most Terrifying Epidemic—And How It Changed Science, Cities, and the Modern World*. New York: Penguin, 2006.
- Johnston, John. *Information Multiplicity: American Fiction in the Age of Media Saturation*. Baltimore: Johns Hopkins UP, 1998.
- Joyce, James. *Ulysses*. 1922. New York: Vintage, 1990.
- Kaplan, Caren. "Transporting the Subject: Technologies of Mobility and Location in an Era of Globalization." *PMLA* 117.1 (January 2002): 32-42.
- Kerouac, Jack. *On the Road: The Original Scroll*. New York: Viking, 2007.
- Kittler, Friedrich. *Gramophone, Film, Typewriter*. Trans. Geoffrey Winthrop-Young and Michael Wutz. Stanford: Stanford UP, 1999.
- Koestenbaum, Wayne. *Andy Warhol*. New York: Viking, 2001.
- Kunzru, Hari. *Transmission*. New York: Dutton, 2004.
- Kwolek-Folland, Angel. *Engendering Business: Men and Women in the Corporate Office, 1870-1930*. Baltimore: Johns Hopkins UP, 1994.
- Landow George. *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology*. Baltimore: Johns Hopkins UP, 1997.
- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford UP, 2005.
- Lentricchia, Frank, ed. *New Essays on White Noise*. Cambridge: Cambridge UP, 1991.
- . "Tales of the Electronic Tribe." *New Essays* 87-113.

- Lichtenstein, Grace. "Flash: Movietone Struggling to Save Its Old Newsreels." *New York Times* 17 Dec 1977: 52.
- LiPuma, Edward and Benjamin Lee. *Financial Derivatives and the Globalization of Risk*. Durham: Duke UP, 2004.
- Liu, Alan. *The Laws of Cool: Knowledge Work and the Culture of Information*. Chicago: U of Chicago P, 2004.
- Lovink, Geert. *Dark Fiber: Tracking Critical Internet Culture*. Cambridge: MIT P, 2002.
- Ma, Sheng-mei. "The Great Dictator and Maus: 'The Comical' Before and After the Holocaust." *Proteus: A Journal of Ideas* 12:2 (1995 Fall): 47-50.
- Maland, Charles J. *Chaplin and American Culture: The Evolution of a Star Image*.
- Malanga, Gerard. *Archiving Warhol: Writings and Photographs*. New York: Creation, 2002.
- Manovich, Lev. *The Language of New Media*. Cambridge: MIT P, 2001.
- Marshall, Richard D. "Jean-Michel Basquiat: Speaking in Tongues." Chiappini 53-84.
- McCaffery, Larry, ed. *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodern Science Fiction*. Durham: Duke UP, 1991.
- McClure, John A. *Late Imperial Romance*. New York: Verso, 1994.
- McCoy, Beth A. "Race and the (Para)Textual Condition." *PMLA* 121.1 (January 2006): 156-169.
- McHale, Brian. *Constructing Postmodernism*. London: Routledge, 1992.
- . *Postmodernist Fiction*. New York: Methuen, 1987.
- . *The Obligation Toward the Difficult Whole: Postmodernist Long Poems*. Tuscaloosa: U of Alabama P, 2004.
- McKenzie, D. F. *Bibliography and the Sociology of Texts*. London: British Library, 1986.
- McKeon, Michael. "Generic Transformation and Social Change: Rethinking the Rise of the Novel." McKeon, *Theory* 382-399.
- , ed. *Theory of the Novel*. Baltimore: Johns Hopkins UP, 2000.

- Millard, A. J. *American on Record: A History of Recorded Sound*. New York: Cambridge UP, 1995.
- Miller, Paul D., aka DJ Spooky, That Subliminal Kid. *Rhythm Science*. Cambridge: MIT P, 2004.
- Mitchell, W. J. T. "The Commitment to Form; or, Still Crazy after All These Years." *PMLA* 118.2 (March 2003): 321-325.
- Moran, James M. *There's No Place Like Home Video*. Minneapolis: U of Minnesota P, 2002.
- Moulthrop, Stuart. "No War Machine." *Reading Matters: Narrative in the New Media Ecology*. Ed. Joseph Tabbi and Michael Wutz. Ithaca: Cornell UP, 1997. 269-292.
- Myers, Tony. "The Postmodern Imaginary in William Gibson's *Neuromancer*." *MFS: Modern Fiction Studies* 47.4 (Winter 2001): 887-909.
- Nicosia, Gerald. *Memory Babe: A Critical Biography of Jack Kerouac*. Berkeley: U of California P, 1994.
- Orr, Alice. *No More Rejections: 50 Secrets to Writing a Manuscript that Sells*. Cincinnati: Writers' Digest, 2004.
- Osteen, Mark. *American Magic and Dread: Don DeLillo's Dialogue with Culture*. Philadelphia: U of Pennsylvania P, 2000.
- Perreault, John. "Andy Warhol." 1970. Pratt 60-66.
- Porush, David. *The Soft Machine: Cybernetic Fiction*. New York: Methuen, 1985.
- Pratt, Alan R., ed. *The Critical Response to Andy Warhol*. Westport: Greenwood, 1997.
- Price, Leah and Pamela Thurschwell. "Invisible Hands." Introduction. Price and Thurschwell, *Literary Secretaries/Secretarial Culture* 1-12.
- , eds. *Literary Secretaries/Secretarial Culture*. Burlington: Ashgate, 2005.
- Pynchon, Thomas. *The Crying of Lot 49*. 1966. New York: HarperCollins, 1999.
- . *Gravity's Rainbow*. 1973. New York: Penguin, 1995.
- Raley, Rita. "Machine Translation and Global English." *The Yale Journal of Criticism* 16.2 (Fall 2003): 291-313.

- Rettberg, Scott. "American Simulacra: Don DeLillo's Fiction in Light of Postmodernism." *Undercurrent* 7 (1999 Spring). 18 June 2007.
<<http://retts.net/documents/americansimulacra.pdf>>
- Rodowick, D.N. *Reading the Figural, or, Philosophy After the New Media*. Durham: Duke UP, 2001.
- Rose, Tricia. *Black Noise: Rap Music and Black Culture in Contemporary America*. Hanover, Wesleyan UP, 1994.
- Sarris, Andrew. "The Great Dictator." *Village Voice* 5 March 1964: 12, 16; 12 March 1964: 16.
- Shiach, Morag. "Modernity, labour, and the typewriter." *Modernist Sexualities*. Eds. Hugh Stevens and Caroline Howlett. Manchester: Manchester UP, 2000. 114-129.
- Sirmans, Franklin. "In the Cipher: Basquiat and Hip-Hop Culture." *Basquiat*. Ed. Marc Mayer. Brooklyn: Brooklyn Museum, 2005.
- Slide, Anthony. *Nitrate Won't Wait: A History of Film Preservation in the United States*. Jefferson, NC: McFarland, 1992.
- Smither, Roger, ed. *This Film Is Dangerous: A Celebration of Nitrate Film*. Brussels: Fédération International des Archives du Film, 2002.
- Sobchack, Vivian. "The Scene of the Screen: Envisioning Cinematic and Electronic 'Presence.'" *Materialities of Communication*. Ed. Hans Ulrich Gumbrecht and K. Ludwig Pfeiffer. Trans William Whobrey. Stanford: Stanford UP, 1994. 83-106.
- Sontag, Susan. "Fascinating Fascism." *Under the Sign of Saturn*. New York: Vintage, 1981. 73-108.
- Spiegelman, Willard. *How Poets See the World: The Art of Description in Contemporary Poetry*. New York: Oxford UP, 2005.
- Sponsler, Claire. "Cyberpunk and the Dilemmas of Postmodern Narrative: The Example of William Gibson." *Contemporary Literature* 33.4 (1992 Winter): 625-644.
- Stallabrass, Julian. "Empowering Technology: The Exploration of Cyberspace." *New Left Review* 211 (1995): 3-32.
- Stoker, Bram. *Dracula*. 1897. Ontario, Canada: Broadview, 1998.
- Tabbi, Joseph. *Postmodern Sublime: Technology and American Writing from Mailer to Cyberpunk*. Ithaca: Cornell UP, 1995.

- The Great Dictator*. Dir. Charlie Chaplin. United Artists, 1940.
- The Matrix*. Dirs. Larry and Andy Wachowski. Warner Brothers, 1999.
- The Typing Explosion*. Dir. Cynthia Rose. Mucha Creative, 2003.
- Tusa, Michael C. "Beethoven's 'C-Minor Mood:' Some Thoughts on the Structural Implications of Key Choice." *Beethoven Forum* 2.1 (1993): 1-28.
- Typing Explosion, The. "Calendar." *Typing Explosion | Union Local 898*. 25 Oct 2006 <<http://www.typingexplosion.com/html/appointments.pdf>>.
- . "Typing Explosion Press Kit." *Typing Explosion | Union Local 898*. 25 Oct 2006 <<http://www.typingexplosion.com/presskit/presskit.pdf>>.
- TypeTrace Exhibition*. 2008. DivvyDual. 22 August 2008 <http://divvydual.org/wiki/TypeTraceExhibition>.
- "Use of Office Space." *Office Management: A Handbook*. Ed. Coleman L. Maze. New York: Ronald, 1947. 379-426.
- Wardrip-Fruin, Noah and Nick Montfort. *The New Media Reader*. Cambridge: MIT P, 2003.
- Warhol, Andy and Pat Hackett. *POPism: The Warhol '60s*. New York: Harcourt Brace Jovanovich, 1980.
- Warhol, Andy. *a: a novel*. 1968. New York: Grove, 1998.
- . *The Philosophy of Andy Warhol (From A to B and Back Again)*. New York: Harcourt Brace Jovanovich, 1975.
- Weheliye, Alexander G. *Phonographies: Grooves in Sonic Afro-Modernity*. Durham: Duke UP, 2005.
- Wershler-Henry, Darren S. *The Iron Whim: A Fragmented History of Typewriting*. Toronto: McClelland & Stewart, 2005.
- Wicke, Jennifer. "Vampiric Typewriting: *Dracula* and Its Media." *ELH* 39 (1992): 467-93.
- Wolf, Reva. *Andy Warhol, Poetry, and Gossip in the 1960s*. Chicago: U of Chicago P, 1997.
- YouTube*. 2008. YouTube, LLC. 9 June 2008 <http://www.youtube.com/results?search_query=remix&search_type=&q=f>.

Young, Kevin. "Poetics Statement: from *Deadism*." *American Poets in the 21st Century: The New Poetics*. Ed. Claudia Rankine and Lisa Sewell. Middletown: Wesleyan UP, 2007. 190-192.

---. *To Repel Ghosts: Five Sides in B Minor*. South Royalton, Vermont: Zoland Books, 2001.

---. *To Repel Ghosts: The Remix*. New York: Knopf, 2005.

Curriculum Vitae

Paul Joseph Benzon

October 2008	Ph.D., Literatures in English, Rutgers University, New Brunswick.
January 2005	M.A., Literatures in English, Rutgers University, New Brunswick.
June 2001	B.A., <i>summa cum laude</i> , English, Williams College.
September 2008- May 2009	Assistant Professor (Teaching and Instruction), Department of English, Temple University
May 2008-July 2008	Adjunct Professor, Department of American Studies, Rutgers University, New Brunswick.
September 2007- May 2008	Film Teaching Assistant, Department of English, Rutgers University, New Brunswick.
September 2007- December 2007	Adjunct Professor, Department of American Studies, Rutgers University, New Brunswick.
September 2006- May 2007	Graduate Fellow, Center for Cultural Analysis, Rutgers University, New Brunswick.
September 2005- May 2006	Dissertation Fellow, Department of English, Rutgers University, New Brunswick.
September 2002- May 2005	Teaching Assistant, Department of English, Rutgers University, New Brunswick.
September 2001- May 2002	Graduate Fellow, Department of English, Rutgers University, New Brunswick.
June 1999- September 2001	Senior Editor, Lightbulb Press.
January 2010	"Lost in Transcription: Postwar Typewriting Culture, Andy Warhol's Bad Book, and the Standardization of Error," <i>PMLA</i> 125.1.