GUT FEELINGS: HUMAN WASTE AND SIGNS OF HEALTH IN 20^{TH} - AND 21^{ST} - CENTURY LITERATURE

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PUBLIC ABSTRACT

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This dissertation responds to new knowledge about human excrement emerging throughout the 20th and 21st centuries that changes our relationship to waste. As we have come to know more about the community of microbes that live in our bowels, it becomes increasingly clear that many of the traits that we think of as "classically human," like thinking and feeling, originate in the guts. Here I offer a framework for thinking about our bodies and our lives in response to these new theories of the human microbiome, and I use a blend of literary and scientific texts to do so. I insist that neither novel nor clinic can account for bodily wastes without relying in some way on the other, and so I argue for a new scatological approach that brings literature and medical science together in order to consider what the two can do together.

In my first chapter, I explore the long history and deep roots these changes have. I focus on a hundred-year span between 1908 and 2008, which I call the long century of shit. At the beginning of this century, the Nobel Prize-winning scientist Èlie Metchnikoff declared that the main cause of human mortality was poisoning by intestinal microbes; in 2008, Alexander Khoruts successfully treated a patient's antibiotic-resistant infection by transplanting a stool sample from her husband into her intestines. In the century between these two milestones, I look to several novels and clinical texts to explain how this transformation in thinking about excrement and its effect on our health could happen.

My second chapter returns to the beginning of this long century of shit to focus on several novels that take place inside the human body. Here I argue that the combination of anatomy and

ecology that sees the body as a setting rather than a character creates a new formation I dub the "fecological body," which I present as integral to thinking through the experience of living as a singular individual as well as the host to millions.

Chapter Three is set near the halfway point of the century and takes up three novels in which people travel through sewers as a form of escape. I emphasize the historical changes in American infrastructure that coincide with the writing of these novels, particularly the widespread construction of new waste treatment plants throughout the 1960s, 70s, and 80s. I show how escaping to the underworld of the sewer adopts the microbial ability to travel through bodies while assigning negative associations with excrement to communities that are consciously excluded from the new world these infrastructure projects connect.

In my final chapter, I present a new model of kinship that emerges from this analysis. Excremental kinship, as I call it, emphasizes ways of living with others that sees all bodies as socially constructed through both physical material and cultural practice. By focusing on scenes of excremental closeness in several novels as well as a number of critical texts on kinship and bodily matter, I attempt to show how the new scatological perspective I develop throughout this dissertation can make possible new ways of understanding our relationship to others as well as ourselves as a type of kin.

ABSTRACT

GUT FEELINGS: HUMAN WASTE AND SIGNS OF HEALTH IN 20^{TH} - AND 21^{ST} - CENTURY LITERATURE

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Gut Feelings: Human Waste and Signs of Health in 20th- and 21st-Century Literature reads narrative and scientific descriptions of the human intestinal tract alongside contemporary ecological interest in interdependent and vulnerable ecosystems. Situated between the advent of germ theory coming out of the Pasteur Institute at the end of the 19th century and the rethinking of gut flora as a source of health rather than disease at the beginning of the 21st, I argue for the gut's increasing importance as a site of symbiotic community. By pairing literary representations of excrement with contemporary gastroenterological and microbiological knowledge of the human microbiome, I present a symbiotic scatology attentive to the vibrancy of human waste.

Chapter 1 begins in 1908 with the publication of *The Prolongation of Life: Optimistic Studies* by Èlie Metchnikoff, an early microbiologist and sub-director of the Pasteur Institute. Metchnikoff presents his "just inference that the duration of life of mammals has been notably shortened as the result of chronic poisoning from an abundant intestinal flora" (72). I track how cultural narratives of human waste and the boundary-crossing promises of gut flora evolve out of and beyond this "just inference" over the course of the 20th century. I read Aldous Huxley's 1939 novel *After Many a Summer Dies the Swan* against Christopher Isherwood's *A Single Man* (1964) and Greg Egan's *Permutation City* (1994) to show how Metchnikoff's early theories of excrement as a source of bodily intimacy and infinity transform in cultural narratives of waste.

My second chapter continues these fecal narratives to propose how the "fantastic voyage" genre of literature, particularly those that tout adventure on the alimentary canal, rewrite the

human body as an ecosystem, a mode of embodiment that I dub the "fecological body." The texts under consideration for this chapter – Mark Twain's *3,000 Years Among the Microbes* (1905), George Chappell's *Through the Alimentary Canal With Gun and Camera* (1930), Nathanael West's *The Dream Life of Balso Snell* (1931), and Joe Orton's *Head to Toe* (1971) – use ecological terms and imagery to depict the body as a varied plane cohabited by human and nonhuman multitudes that are best revealed in waste.

Chapter 3 considers how this excremental topology affects the way human bodies inhabit other spaces by joining the alimentary canal of individuals to the sewers of the body politic. I bridge eco- and anatomic materialism with public infrastructure analysis by close reading literary scenes where bodies escape through toilets. In particular, I read Slothrop's exodus through the toilet to save his harmonica in Pynchon's *Gravity's Rainbow* (1973), the dictator Sam flushing himself to elude the revolution against him in Ishmael Reed's *The Free-Lance Pallbearers* (1967), and Andy Dufresne's toilet-assisted escape from the titular prison in Stephen King's "Rita Hayworth and Shawshank Redemption" (1982). I historicize these texts within a brief window in which ecological protests rendered the technologies of waste management hypervisible in order to parse the cultural importance of travels through excremental spaces.

In my final chapter, I develop these communal materialities of waste into a model of excremental kinship. I situate contemporary family narratives from A.M. Homes's *May We Be Forgiven* (2012), Katherine Dunn's *Geek Love* (1989) and Nicholson Baker's *Room Temperature* (1984) alongside new concepts of kinship and ecology emerging from the work of Donna Haraway, Eve Sedgwick, and Sarah Ensor. Focusing on the "common intestine" of Dunn's conjoined twins Iphy and Elly Binewski, I present shit in this final chapter as a kinship object grounded in a form of mutual relation that resembles and resists genealogical heredity.

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In what follows, I discuss at length the various ways that human experience emerges from the unseen workings of a vast multitude of other entities that together compose the fiction of the singular. It is fitting, then, that I begin by expressing my gratitude for the many others who left their mark on the guts of this document and who have helped to shape it into its present form.

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I became a father while writing this dissertation, and I cannot express the thanks and joy I feel for my daughter Rose Constance. She has been a dear comfort and clear motivation while completing this project.

Most of all, I would like to thank my wife Michelle Rae Rigsby Sabo for the support and sacrifice she has provided me throughout my doctoral career. She has endured long hours and uncertain times with me, celebrating my successes and weathering my challenges as her own. Michelle has been an unwavering source of warmth and humor, and she has worked tirelessly, and too often without proper recognition, to support the work that reaches its culmination in this project. There is nothing she could ask for that I would not give in thanks for her care, compassion, and strength.

TABLE OF CONTENTS

Introduction: Excremental Insides	1
Chapter One - Six Stories of Human Waste: A Long Century of Shit	23
1908: The Prolongation of Life: Optimistic Studies (Metchnikoff)	
1939: After Many a Summer Dies the Swan (Huxley)	
1958: "Fecal Enemas as an Adjunct in the Treatment of Pseudomembranous	
Enterocolitis" (Eiseman)	
1964: A Single Man (Isherwood)	
1994: Permutation City (Egan)	54
2008: "Changes in the Composition of the Human Fecal Microbiome After	
Bacteriotherapy for Recurrent Clostridium difficile-associated Diarrhea" (Khorut	(s) 60
Chapter Two - "Onward and Inward!": Travels Through the Fecological Body	
Thirdspace, Turdspace, and the Bodyscape	
"An epoch-making achievement": Contextualizing the Fecological Body	
In Human Spaces: The Ecology of the Alimentary Canal	
Inhuman Spaces: Fecological Journeys in West and Orton	
"He might liken this house of ordure to the world": The Fecal Foundation of the	
Fecological Body	
"Inside and out": A Conclusion	119
Chapter Three - "This passage to the Atlantic": Travels Through Sewers in Mid-Co	•
Literature	
Fouling the Bay: Ishmael Reed and the Ecological Impact of the State-as-Sewer.	
"That's what that white toilet's for": Racing Through Pynchon's Underworld	
"Oh shit it's shit": Stephen King's Competing Infrastructures	
Flushed to the Sea: A Conclusion	161
Chapter Four - Excremental Kinship, or Family is a Big Job	164
The Abject Avunculate	
"Would disgust ever outweigh love?": Conditions of Kinship in <i>Room Temperatu</i> "It's like a freak show, a random collection of people": <i>May We Be Forgiven</i> an	
Excremental Path to Togetherness	
Conclusion: Counting Heads and Asses in <i>Geek Love</i>	
WORKS CITED	207

Introduction: Excremental Insides

"A truly imaginative writer should be able to frame a romance about anything, no matter how large or how small. He should be able to write a novel about a microbe, so to speak. Not that a microbe would offer any interest. I only use that as a sort of simile. Not even DeFoe could have written about a microorganism."

- Charles Finger, *The Spreading Stain* (1927), p. 5

In Jonathan Miles's novel *Want Not* (2013), the hapless linguist Elwin Cross Jr. joins the Waste Isolation Program. He is part of the Markers panel, tasked with devising a reliable means to communicate with inhabitants of the New Mexico flats ten thousand years in the future, warning them of the radioactivity of the nuclear wastes the United States government has buried in the desert. Elwin waxes philosophically about the project, which, despite being "the longest-range communication attempt we've ever undertaken, as a society," only preserves "[s]pent fuel rods, warhead shavings, Pyrex tubes, rags, junk. Just a big radioactive pile of...shit" (158, ellipsis in original). His colleague Carrollton reminds him that "that's all *any* civilization leaves behind...Historically speaking, we are what we bury. Biologically, too. There's a hundred thousand terabytes of data in a single gram of human feces. Talk about shit" (158, ellipsis mine).

Like Carrollton, Rose George also adopts a gram of feces as a unit of measurement in her pop sociology tome *The Big Necessity: The Unmentionable World of Human Waste and Why It Matters* (2014). George, however, finds much less cause for celebration. "A gram of feces," she writes, "can contain 10 million viruses, 1 million bacteria, 1,000 parasite cysts, and 100 worm eggs" (2). Nevertheless, she offers a slight reassurance in response to the staggering populations

5

at home in our waste. "Bacteria," after all, "can be beneficial: the human body needs bacteria to function, and only 10 percent of cells in our body are actually human" (2). This figure is widely cited and, incredibly, also originates in a gram of feces. In a letter to the editors of *Microbe* magazine in February 2014, the National Institute of Health's Judah Rosner critiques the "frequent assertion that the number of cells in the human microbiota is ten times as numerous as the number of cells in the human body" (47). As an example, he cites three industry periodicals from 2013 alone that use this ratio uncritically, despite the fact that, at best, it seems to be based on "unidentified experiments or estimates" and is "certainly not a statement that should be accepted on faith" (47). The originator of the 10-to-1 cell count seems to be the microbiologist Thomas Luckey in 1972, who "bases this on estimates of 10¹¹ bacteria/g of feces and an assumption of 1 kg of feces per adult" (47). Though the methods are suspect, the trend is clearly to find greater and greater quantities of life in its various forms in a single gram of human waste.

Increase the amount of shit to dig through and the revelations contained therein grow accordingly. In *Freedom* (2010), Jonathan Franzen puts Joey Berglund on his knees and up to his elbows as he roots through the toilet to find his wedding ring, accidentally swallowed while attempting to cheat on his wife. He has far more than a gram of feces to sift through, having finally defecated after three days of trying to hold in his bowel movements, and he finds that "the smell of the shit was something else. It was so bad as to seem evil in a moral way" (431). The foul odor and amount of his excrement stymie his attempts to insulate himself from his waste. Though he first tries to strain the turgid water with a fork, he soon finds that he has

no choice but to lift out each turd and run it through his fingers, and he had to do this quickly, before things got too waterlogged. Holding his breath, his eyes watering furiously, he grasped the most promising turd and let go of his latest fantasy, which was

that one hand would suffice. He had to use both hands, one to hold the shit and the other to pick through it. He retched once, drily, and got to work, pushing his fingers into the soft and body-warm and surprisingly lightweight log of excrement. (431-2)

Joey exults that his search ends quickly; the second turd he dissolves in his hand contains the ring, "[a] hardness amid softness, a clean circle within chaos" (432). In his joy, Joey finds that he has become "a different person...He was the person who'd handled his own shit to get his wedding ring back" (432). In addition to his ring, then, Franzen's protagonist fishes a new identity out of the toilet as well, and it happens to stick. Joey washes his hands and returns to his wife, recommitted to the doting, long suffering Connie by dint of his new excremental sense of self.

Like Joey Berglund, this dissertation is interested in ways of finding oneself in one's shit. I have chosen to start with these three preliminary examples – Miles's terabytes, George's parasites, and Franzen's dirty jewelry – for their portrayal of human waste as an object with both physical and conceptual depth. Whether the turd one sifts through contains human data, non-human invaders, or startling moments of self-realization, the very fact of it having contents at all represents a shift in scatological thinking that, throughout this project, I attribute to new understandings of gastroenterology, anatomy, and the human microbiome that emerge over the course of the 20th and 21st centuries. In what follows, I explore ways that literary and medical texts from this period use excrement to gauge bodily relationships. In so doing, I hope to be the type of imaginative writer Charles Finger describes in the portion of *The Spreading Stain* that I have chosen as the epigraph for this introduction. This dissertation insists on the microbe as an object of interest as the center of a certain romance, around which I build a reading of excrement oriented toward a sense of community that joins symbiotic assemblages across a variety of

scales, from the microscopic inhabitants of the intestinal tract to the vast networks of sewage infrastructure that undergird the built space of the body politic. As I put it my first chapter, my goal in this project is to decenter the human "I" in favor of the microbial "we," and then use that inherent plurality to suggest new ways of living with ourselves and others.

My goal in bringing narrative and anatomy together is for neither to take precedence over the other. Instead, I see the literary and the scientific working together as two voices in an ongoing conversation about waste and the emergence of identities, both singular and collective, from many components working together symbiotically. Though it can be tempting to view scientific disciplines in opposition to the humanities, medical discourse has long relied and even embraced literary representations as pertinent to the study of excrement and minute forms of life. The literary allusion in the title to Ed Yong's excellent I Contain Multitudes: The Microbes Within Us and a Grander View of Life (2016), a text that prompted much of my thinking throughout this project, emphasizes literature's central role as an interpretive lens for changing scientific paradigms that cast human life as an assemblage of familiar and foreign actants, rather than the "pleasant fiction" of the singular subject (Yong 5). Theodor Rosebury, the midcentury bacteriologist and author of *Life on Man* (1969), includes a list of such prominent literary scatologists as Rabelais, Swift, and Joyce, among others, as a chapter within his treatise on intestinal microbes. Even Elie Metchnikoff, whose Nobel-prize winning study of gut flora and human excrement serves as an important interlocutor for the first two chapters of this dissertation, devotes five chapters of his 1908 text The Prolongation of Life: Optimistic Studies to an analysis of Goethe's Faust as an example of his theory of scatological pessimism and its biological impact.

Taking its cue from this tradition, the literature in this dissertation refuses to chase the science, as though the role of fiction were to confirm in narrative what biologists propose through experimentation. Nor is its role one of prophecy, as though the value of literature can only be determined after the fact, once science has stepped in and found that the novelists were right all along. In bringing the literary together with the medical, I simply propose that we see scatology as a polyvocal discipline, in which different methodologies, disciplines, and levels of complexity coexist without undue friction. Thus, I view this as a work of material scatology. By grounding this project in materiality, I lay bare my interest in the physical properties of excrement and the microbial populations it sustains. In calling this scatology, I buck the trend of other scholars of human waste who have tried to distance themselves from the term. In the preface to Merde: Excursions in Scientific, Cultural, and Socio-historical Coprology, Ralph Lewin "trie[s] to distinguish between coprological subjects, involving the study of feces, and scatological material, which is generally understood to refer to dirty words" (x). Similarly, despite having written a fairly lengthy book about the infrastructure and flows of bodily effluvia, Rose George insists that she is "no scatologist, fetishist, or coprophagist" (6). To say nothing of the equation of thinking shit with eating it, I insist that the way we narrate excremental moments both inflects and is inflected by the way we measure its so-called objective properties.

Traditional excremental perspectives cannot imagine shit doing anything other than being shit. This is precisely the debate David Foster Wallace dramatizes in the opening to his novellalength story "The Suffering Channel," in which the editorial staff of *Style* magazine debates whether small sculptures, excreted "[a]lready fully formed" from the talented sphincter of Brint Moltke (239), can be considered art. A skeptical associate editor is blunt: "But they're shit" (238). Skip Atwater persists - "And yet at the same time they're art. Exquisite pieces of art.

They're literally incredible" - but to no avail. "No," the associate editor replies, "they're literally shit is literally what they are" (238). In his insistence that the sculptures can be shit and art "at the same time," Atwater argues that excrement is capable of simultaneity. His editor's stubborn rejoinder repeats "literally" to refuse excrement the complexity this would entail.

Wallace's associate editor presents a view of waste as an abject surface – the alwaysalready outside, filthy foreign object. This is, in many ways, consistent with Julia Kristeva's
work in *Powers of Horror: An Essay on Abjection*, which has long determined the trajectory for
studies of human waste. There, Kristeva associates "[e]xcrement and its equivalents (decay,
infection, disease, corpse, etc.) [with] the danger to identity that comes from without: the ego
threatened by the non-ego, society threatened by its outside, life by death" (71). Excrement, for
Kristeva, is everything outside against which the inside is contrasted and, thus, from which the
inside is determined. Abject waste can only present a surface because its presence always
threatens externality, the collapse of the boundary between inside and outside.

This, in fact, is the value of the abject. Abjection dissolves boundaries and invites reflection on binaries that like self and other that are grounded in convention but circulate as nature. As theories of the interconnection of agency continue to proliferate under the auspices of the recent material turn, schemas like these are increasingly valuable as a critical method.

Timothy Morton suggests as much in his essay "Frankenstein and Ecocriticism," where he identifies abjection as

the basic feeling of ecological awareness: I find myself surrounded and penetrated by other beings that seem to be glued to me, or which are so deeply embedded in me that to get rid of them would be to kill me. Tolerance of the creature, and anything greater than

tolerance, would require becoming accustomed to abjection rather than trying to get rid of it. (155)

Morton is right to notice the abject foundation of material ecocriticism's interest in boundary-blurring networks of connection, whether we recognize it as Barad's intra-action, Alaimo's transcorporeality, Morton's own mesh, or any of the other variations on the same theme. It is worth noting, in this regard, that Dana Phillips and Heather Sullivan's introduction to *ISLE*'s special issue on material ecocriticism privileges "Dirt, Waste, Bodies, Food and Other Matter" as the objects of study they mean to address; each of these either bears the mark of abjection, as in the case of dirt and waste, or is commonly seen as a source for something that does, as with bodies, food, and, presumably, "other matter" as well.

The precipitating idea for this dissertation, however, comes in recognizing a fundamental inadequacy in the language of abjection for this type of critical work. Kristeva is clear that the abject precipitates an affective response like horror or rejection in response to the dissolution of boundaries, but the promise of the material turn rests in its capacity to find wonder in those same material relationships. Kristeva describes excremental abjection as death threatening life; how, then, do we theorize shit when it is seen as a source of life instead, or as well? Morton portrays ecological awareness as a feeling a process of "becoming accustomed to abjection," but in its evolution to the mundane the abject is surely transformed. My work in this dissertation is to

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¹ Barad's *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (2007) argues that "the primary ontological unit is not independent objects with inherent boundaries and properties but rather *phenomena*" and that intra-actions, the relations emerging between these phenomena rather than existing a priori, are responsible for "*agential separability* – the condition of *exteriority-within-phenomena*" (139, 140).

² In *Bodily Natures: Science, Environment, and the Material Self* (2010), Alaimo deploys trans-corporeality to explore how "the human is always intermeshed with the more-than-human world" (2). She positions trans-corporeality as the theoretical site "where corporeal theories, environmental theories, and science studies meet and mingle in productive ways" (3).

³ As articulated in *The Ecological Thought* (2010), Morton asserts that "[a]ll life forms are the mesh, and so are all the dead ones, as are their habitats, which are also made up of living and nonliving beings" (29).

consider examples of this transformation in action and propose a critical framework for responding to it.

I have selected human excrement as the critical tool that grounds this project for three reasons. First, at the end of the digestive tract, defecation is grounded in the mundane in ways that other forms of excrement are not. In "The Excremental Sublime: The Postmodern Literature of Blockage and Release," for instance, Roberto Dainotto bases his excremental sublime on the irruptive power of vomit within postmodern literature though he invokes bodily excretions of all kinds. Vomiting is an extraordinary act, an emergency purge; I am more interested in how the regularity of defecation and its essential role in daily, life-sustaining processes of ingestion and digestion empower feelings of abject familiarity and habit that the suddenness of vomit cannot. Excrement is thus associated with life in two ways. At the physical level, it is a necessary byproduct of the sustenance gained through ingestion. At the cultural level, defecation is ingrained in the social habitus. Though the infrastructure of waste is often invisible, its presence is a ubiquitous feature of social spaces and practices nonetheless.

Like Dainotto, Julia Kristeva lumps vomit together with shit, and includes tears and menstrual blood in her equation of abjection as well. Menstrual blood is an interesting material to consider, given that it too appears at regular intervals as part of a physical process that begins elsewhere in the body. Urine fits this description as well, but neither factors meaningfully into this dissertation. This is due to the fact that excrement is uniquely alive with the gut flora that populate the human intestinal tract. I focus on shit in this dissertation in order to account for growing knowledge of the gut's regulatory functions within the body, on par with the brain or heart. Menstrual blood and urine are abject body materials that are largely sterile. Feces are

decidedly not, and here I theorize ways for their microscopic vibrancy to resonate on larger scales.

My wording here is carefully chosen to invoke the vibrancy of shit for a pair of reasons. First, my attempt to invoke Jane Bennett's *Vibrant Matter: A Political Ecology of Things* (2010) should be fairly transparent. Bennett's work has been integral to the object-oriented ontology and new materialist movements that this dissertation sees itself in conversation with. In particular, I hope that my own work of finding the inhuman in the guts of the human complicates our understanding of agency as a collaboration between human and nonhuman actants by showing how absolutely inextricable the former of these is from the latter, particularly when viewed from the guts.

Secondly, I invoke vibrancy here in response to Dana Phillips's reluctance to do so in "Excremental Ecocriticism and the Global Sanitation Crisis." Phillips magnanimously declines to "strain the reader's credulity by calling shit vibrant, vital, energetic, lively, quivering, vibratory, and evanescent, as Bennett would have it, though [he] will acknowledge that shit is often effluescent" (141). I insist on my reader's credulity in this matter. The excremental ecocriticism Phillips proposes is valuable insofar as it connects sanitation issues to larger trends within waste studies, but it cannot be the only mechanism we have for responding to shit in the world or on the page. In part, this is due to the fact that when Phillips says shit, he means sewage; this distinction between the private matter of one body and the accumulated waste of a public traces at least as far back as Dominique Laporte's *History of Shit*, and the slippage between the two is a common critical error that, curiously, always seeps in the same direction. Scholars frequently invoke shit en route to an argument about sewage, but never move in the

opposite direction. I hope to correct that by devoting this dissertation to intimate wastes and individual bowel movements.

As a consequence of this emphasis, mine is the first cultural study of human waste that I have encountered that considers excrement inside the body as relevant to a scatological method. This is by design. By naming this dissertation *Gut Feelings*, I mean to invoke the affective rumblings of the digestive tract alongside the intuitive forms of knowledge that we locate in the gut in order to suggest ways that the two may be connected – that is, how we might think of the intestines as a thinking organ. I claim the bowels in order to insist on the physical and affective rumblings located there as relevant to the study of their products. My interest in the liveliness of excrement is grounded in recent medical studies that urge us to reconsider our reactions to waste and the real value that the intestines and their contents have within the body. To illustrate, let me briefly cite three ways shit has changed in the past ten years.

In 2011, the journal *Nature* published an essay with the title "Enterotypes of the Human Gut Microbiome" written by Manimozhiyan Arumugam and 41 named co-authors; the Metagenomics of the Human Intestinal Tract (MetaHIT) Consortium was listed as the 42nd co-author of the piece, presumably inflating the number of contributors even further. While this type of multi-authored work is not uncommon in the sciences, this collaboration proposed fairly groundbreaking changes to epistemologies of the gut. Together, the two-score researchers identified a set of three robust clusters of intestinal microbiota communities living in the guts of a sampling of patients that spanned the globe. Their findings suggest that there is a "limited number of well-balanced host-microbial symbiotic states that might respond differently to diet and drug intake" (174). These enterotypes suggest affinities among people that do not correspond

to host properties like nationality, gender, age or body mass index (178); that is, gut enterotypes represent an alternate form of kinship that cuts across existing grouping methods.

Subsequent studies lend credence to the idea of using gut population as a conceptual tool for understanding human behavior. In 2014, Emeran Mayer, Rob Knight, Sarkis Mazmanian, John Cryan, and Kirsten Tillish co-authored a meta-analysis in *The Journal of Neuroscience* detailing the role that the microbiome plays in brain activity. They found that gut flora helps to regulate stress and anxiety and even plays a role in cognition and certain human brain diseases, including autism spectrum disorders and chronic pain (15490). The authors call this "concept of gut-microbiome-brain interactions...paradigm breaking" (15494), and it is not hard to see why. If, as the MetaHIT essay concluded, there is a limited number of symbiotic states between human hosts and their intestinal populations, and if that population wields such a profound effect on functions that were previously attributed to the brain, then it becomes increasingly imperative that we start to see excrement as a residue of thought.

One final study, also published in 2014, suggests that we might find affect alongside cognition in the guts as well. John Cryan and Timothy Dinan, the former of whom contributed to the *Journal of Neuroscience* piece, found that changes in the microbiome of mice were accompanied by changes in the mice's emotional state. Cryan and Dinan's findings are suggestive, not determinative, and subject to any amount of fair skepticism, not least of which is that, of course, what's good – or bad – for a mouse may not be so for the human. Nevertheless, we should pause and consider how the gut's emergence as a thinking and feeling organ might cascade through the ways we study thought and affect. Elizabeth Wilson ends her excellent *Gut Feminism*, in which she proposes a methodology for entangling feminist critique with neurobiological study, by briefly invoking the Cryan and Dinan article as being "close enough to

[her concerns] – but not entirely like them" ("Conclusion"). She goes on to suggest that "the microbiome-gut-brain axis is the beginning of a psychosomatic alliance between neurobiological researchers and cultural critics," and by *starting* my work where hers ends, I am hoping to model one way to bring such an alliance to fruition.

It may be said that I have focused on microbes instead of shit in these three examples, and to a certain extent that is true. Microbes live in excrement; they are not excrement themselves. However, throughout this study I insist on seeing gut flora and feces as inextricable from one another. Studies of the former invariably rely on the latter for access. Arumugam et al. remind us that "faecal samples are not representative of the entire intestine" (179), but at the same time rely on fecal samples "collected and frozen immediately" in order to sequence "faecal metagenomes of individuals" (179, 174).

In making this choice, I position this work as a necessary update to the field of waste studies, which remains heavily indebted to the analysis of dirt-avoidance behaviors and taboos of cleanliness that the anthropologist Mary Douglas presented in her magnum opus, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (1966). Modern excremental commentators overwhelmingly cite Douglas's definition⁴ of dirt as "matter out of place" as a starting point for scatological criticism, never mind that to do so deflates human excrement to a singular characteristic rather than remaining attentive, as Skip Atwater insists in "The Suffering Channel," to its capacity for simultaneity. Douglas herself makes this reductive move at least

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⁴ "Matter out of place" is Douglas's definition of dirt only insofar that she is the person to whom the phrase is most regularly attributed. Douglas herself refers to this as "the old definition" she is returning to, which makes it fairly evident that the phrase must have preceded her. Freud uses a startlingly similar variation of the phrase in his 1908 essay "Character and Anal Eroticism," writing, *in English*, that "[d]irt is matter in the wrong place" (296). It is likely that he and Douglas both encountered the definition in William James's *The Varieties of Religious Experience: A Study in Human Nature* (1902), though it should be noted that James writes "matter out of place" (101) rather than Freud's "matter in the wrong place." Richard Fardon's "Citations Out of Place" from the February 2013 issue of *Anthropology Today* does nice work tracing "matter out of place" back at least as far as 1852.

more explicit than the bulk of scholars who cite her. She is careful to note that dirt is matter out of place only "[i]f we can abstract pathogeneticity and hygiene from our notion of dirt" (44). The "matter out of place" lens is thus predicated upon dismissing the advancements to the science of shit to a degree, I argue, that is incommensurate with the sociocultural role that these advancements play. The inadequacies of a framework for talking about excrement that does not consider its microbial vibrancy, and the need for one that does, motivate my study in equal measure.

This leads into the third and most pressing reason for adopting human excrement as the object of study for this dissertation, which that it is, simply, everywhere. Virginia Woolf noticed this as early as 1925 in the pages of Mrs. Dalloway, where Peter Walsh suspects that years from 1918 to 1923 that he spent away from London "had been...somehow very important. Now for instance there was a man writing quite openly in one of the respectable weeklies about waterclosets. That you couldn't have done ten years ago" (70). It is telling that Woolf's first instinct is to recognize the frank discussion of waste as a sign of modernity; even more telling is the fact that Peter Walsh's insistence that this type of openness "couldn't have [been] done ten years ago" has been repeated in excremental discussions ever since. This very Introduction has now spent several pages elaborating how "shit has changed in the ten years," just as Kelly Anspaugh's essay "Powers of Ordure: James Joyce and the Excremental Vision(s)" in the March 1994 edition of *Mosaic*, for instance, opens by situating itself as a response to "this recent upsurge of interest in excrement and visions thereof" (73). I take the recurring surprise at excrement's importance as a powerful sign of the need for a critical framework that addresses it earnestly.

Other scholars have certainly tried in this regard, but their work too often treats turds as either unbound mounds of possibility, and thus unsuited to specific conclusions, or as convenient ways into other related conversations, and thus not really about excrement at all. Reinhold Kramer's *Scatology and Civility in the English-Canadian Novel* (1997) serves wells as an illustrative example of this first vein of scholarship. Kramer's text is notable for his encyclopedic cataloging of the bathrooms, bowel movements, and bawdy language in Canadian novels, but his thesis that "scatology functions as a trope for the 'world' in a narrative text which abstracts itself, mimetically, from the world" (182) essentially argues that shit can be made to do many things; Kramer's chapters dealing with excrement as it relates to geography, class, race, politics, economics, science, gender, and religion are proof positive of this.

The second vein corrects the unspecificity of the first by recasting shit as a subcategory of other critical concepts. Human excrement and scatological puns are, in these cases, useful fodder en route to theses that, while meaningful, rely on shit by convenience rather than necessity; it would be fair, if not particularly charitable, to call these the books with a chapter on feces. There are few better places to look for an example than in the opening paragraph of the introduction to Susan Signe Morrison's *The Literature of Waste: Material Ecopoetics and Ethical Matter* (2015). Morrison's opening sentence poses the question driving her text: "how can we humans – ourselves sources of waste in terms of all that we discard – understand and cope with waste?" (1). She follows this by listing the items displayed at the Wellcome Collection's 2011 exhibit "Dirt: The Filthy Reality of Everyday Life," including "slabs made of human excrement from India [and] videos of dust mites" (1). Morrison ultimately dubs the exhibit "a crash course in waste (rubble, rubbish, trash, garbage, litter, filth, and excrement)" (1).

In fitting human excrement into the frame of her waste studies model, Morrison elides the ways that waste that emerges bodily might differ from wastes generated by other means.⁵

To avoid this misstep, I deploy a steadfast excremental gaze – a term I am borrowing from Sandra Kumamoto Stanley, which she uses to denote modes of sight that, whether by necessity or preference, see with filth rather than around it. My focus remains on human excrement throughout this dissertation. While my analysis does, at times, focus on gut flora, the fecal foundations of these populations should never fade from the periphery. I also attempt to avoid the slippage from shit to sewage by focusing on the wastes of individual bodies. Even when I travel into the sewers of midcentury America during Chapter 3, I attempt to show how these infrastructure narratives imagine collective wastes traveling through the body politic in a way that is, for the time being, comparable to the flow of digested material down the alimentary canal of the singular body.

My chapters are organized in support of a scatological argument for which shit is not merely convenient but crucial to the thesis it pursues. Each is intended to make a coherent, standalone argument about human excrement as a source of life, while together they also trace an excremental path that originates in the body and circulates into the world in order to show how the vibrant communities that live within the guts lead inexorably to new forms of connection between the symbiotic assemblages we recognize as human. In order to strike the right balance between encyclopedic breadth and rigorous depth, each chapter unfolds as a constellation of three narrative texts – or, in the case of Chapter 2, four, owing to the brevity of the texts in

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⁵ Georges Bataille's concept of base materialism acts as the archetype of this type of thinking, as he equates human feces with other abject spectacles like toes. Will Stockton's and Steve Mentz's chapters in *Prismatic Ecology* (2013) rely on a similar conflation of shit with other dirty things, as does Gay Hawkins's *The Ethics of Waste: How We Relate to Rubbish* (2006), Christopher Schmidt's *The Poetics of Waste: Queer Excess in Stein, Ashbery, Schuyler, and Goldsmith* (2014), and Elizabeth Royte's eco-memoir *Garbage Land: On the Secret Trail of Trash* (2005).

question – alongside a number of scientific and critical theory texts. Methodologically, my intent here is to show how specific ideas about excrement are shared meaningfully across texts without casting the untenably wide net that hinders earlier scatological models.

Chapter 1 begins by introducing the historical framework the rest of the dissertation will follow. In 1908, Elie Metchnikoff published The Prolongation of Life: Optimistic Studies, which presents his "just inference that the duration of life of mammals has been notably shortened as the result of chronic poisoning from an abundant intestinal flora" (72). Exactly fifty years later, the American surgeon Ben Eiseman proposed a radical new treatment for antibiotic-resistant infections, in which a patient's gut would be repopulated with a healthy population received from a healthy donor via a fecal enema. After another fifty years, Eiseman's methods were finally adopted to widescale acclaim when Alexander Khoruts saved the life of a patient by administering a single fecal enema through a procedure that has come to be known as fecal microbiota transplantation (FMT). I dub the hundred years between 1908 and 2008 the long century of shit, and in between these medical dates I track how cultural narratives of human waste and the boundary-crossing promises of gut flora evolve out of and beyond Metchnikoff's "just inference" over the course of the 20th century. I read Aldous Huxley's 1939 novel After Many a Summer Dies the Swan against Christopher Isherwood's A Single Man (1964) and Greg Egan's Permutation City (1994) to show how Metchnikoff's early theories of excrement as a source of bodily intimacy and infinity evolve as they are adopted and adapted in cultural and clinical narratives of waste.

The second, third, and fourth chapters are evenly spaced across the century, roughly corresponding in time of emphasis to the publication of each of the major literary works that I took up in this introductory chapter. For Chapter 2, I return to the start of the century to examine

texts set within the human body along the alimentary canal; there, I consider how these adventure narratives rewrite the human body as an ecosystem, a mode of embodiment that I dub the "fecological body." The texts under consideration for this chapter – Mark Twain's *Three Thousand Years Among the Microbes* (1905), George Chappell's *Through the Alimentary Canal With Gun and Camera* (1930), Nathanael West's *The Dream Life of Balso Snell* (1931), and Joe Orton's *Head to Toe* (1971) – deploy ecological terms to depict the body as a varied plane cohabited by human and non-human multitudes that are best revealed in waste. Understanding the bodily interior as a virtually limitless plane to be occupied by unfathomably small cultures within creates a continuity between individual bodies and the environments they live in, so that the types of agential interpenetration for which material ecocricitism is known can be seen as originating from within in additional being experienced as an outside force.

In Chapter, I consider how this excremental topology affects the way human bodies inhabit other spaces by joining the alimentary canal of individuals to the sewers and systems of the body politic. Set in the same mid-century window as *A Single Man*, during which time a boom in postwar infrastructure activated certain fantasies, and fears, of moving excrementally through the body politic, I bridge eco- and anatomic materialism with questions of public infrastructure by close reading literary scenes where bodies escape through toilets. In particular, I situate my argument around the dictator Sam flushing himself to elude the revolution against him in Ishmael Reed's *The Free-Lance Pallbearers* (1967), Slothrop's exodus through the toilet to save his harmonica in Pynchon's *Gravity's Rainbow* (1973), and Andy Dufresne's toilet-assisted escape from the titular prison in Stephen King's "Rita Hayworth and the Shawshank Redemption" (1982). I historicize the composition of these texts in a brief window in which ecological protests rendered the technologies of waste management hyper-visible in order to

delineate how the microbial power to travel through excremental spaces has been claimed by the powers-that-be while the stultifying associations of waste with abject stagnation have been foisted onto various populations that threaten to challenge the status quo within the body politic.

My final chapter reads texts from the end of the 20th century and beginning of the 21st to more fully develop the ways that excrement acts as a kinship object and practice in exciting, unprecedented ways. I situate contemporary family narratives from Nicholson Baker's *Room Temperature* (1984), A.M. Homes's *May We Be Forgiven* (2012), and Katherine Dunn's *Geek Love* (1989) alongside new concepts of kinship and ecology emerging from the work of Donna Haraway, Eve Sedgwick, and Sarah Ensor. Focusing on the "common intestine" of Dunn's conjoined twins Iphy and Elly Binewski, I present shit in this final chapter as a kinship object grounded in a form of mutual relation that both resembles and resists genealogical heredity.

At every level, my project must be marked by the echo of complementary voices: the literary and the scientific, the historical and the contemporary, the threat and promise of shit. The subtitle of this dissertation, where I address *Bodily Waste and Signs of Health in 20th- and 21st-Century Literature*, should continue this echoing effect. An interest in excrement as a component of regular bodily functioning pervades this dissertation, and as such I look for literary moments where human waste signals health. At the same time, I also propose that we see the wealth of scatological references in the texts I cite as an index for a new vitality in their approach to questions of embodiment and hybridity. The presence and vibrancy of human waste, operating in the ways I detail throughout this dissertation, signals the health of contemporary literature as well. Shit has long been a harbinger of death, but now, read in the ways I propose throughout this dissertation, it prepares us to live together – what Donna Haraway calls "living-with" – as well.

Chapter One

Six Stories of Human Waste: A Long Century of Shit

"This work is very much in progress, as the full diversity of human experience has not yet been captured."

Alexander Khoruts

"As the large intestine not only is the part of the digestive tube most richly charged with microbes, but is relatively more capacious in mammals than in any other vertebrates," Élie Metchnikoff, sub-director of the Pasteur Institute, writes in 1908, "it is a just inference that the duration of life of mammals has been notably shortened as the result of chronic poisoning from an abundant intestinal flora" (72). In response to this "just inference," Metchnikoff proposed several dietary and practical means by which humans might limit their contact with shit and prolong their lives.

Exactly one hundred years later, a gastroenterologist named Alexander Khoruts turned Metchnikoff on his head. As related in Ed Yong's I Contain Multitudes: The Microbes Within Us and a Grander View of Life (2016), in 2008 Khoruts was struggling to treat Rebecca, a patient with an antibiotic-resistant infection of Clostridium difficile, when he

remembered learning about a technique called a faecal microbiota transplant, or FMT. It is exactly what it sounds like: doctors take stool from a donor and install it in a patient's guts, microbes and all. And apparently, that could cure C-diff infections. The idea

⁶ Metchnikoff's name is also given in some sources as Ilya Mechnikov, most notably in the archive of Nobel laureate speeches. However, in choosing the French spelling of his name, I am following the prevailing trend among authors who cite his work in microbiological, gastroenterological, and historical contexts.

seemed revolting, weird, and implausible. But Rebecca had no qualms. She just wanted – needed – to get better. She agreed to the procedure. Her husband donated a stool sample, which Khoruts pulverised in a blender. He then delivered a cupful of the slurry into Rebecca via a colonoscopy. (229)

Yong briefly editorializes, noting that, beyond merely *seeming* revolting and weird, fecal transplants "*are* certainly gross" (230; emphasis added). In an interview with Steve LeBeau for the journal *Global Advances in Health and Medicine*, Khoruts concedes the same, acknowledging that his early methodology for FMT "is disgusting and…probably not a good idea" (77).

But these reservations surely fade in light of the fact that FMT is *resoundingly* effective. Rebecca's infection was cured "thoroughly, quickly, and enduringly" (229). An early clinical trial of FMT treatment, conducted in 2013, was cut short when the lead hospital "deemed it unethical to continue giving people the antibiotic" instead of the fecal transplant (231). Yong notes that, while FMT has only been clinically tested as a treatment for bacterial infections, anecdotal evidence suggests that could be used to treat "obesity, irritable bowel syndrome, autoimmune diseases, mental health problems, and even autism" (232). In the span of a century, shit has been transformed. What Metchnikoff considered the main culprit of human mortality now bears an ethical imperative for intimate restorative contact.

Given that this dissertation is interested in new ways of thinking about human waste, I want to start by focusing on the development, over the course of what I am calling the long century of shit, of this new way of looking forward from shit rather than backward. I characterize this transformation as the evolution of Élie Metchnikoff's "just inference" of shit's mortal danger into the ethical imperative to prescribe contact with shit in clinical trials of FMT therapy.

Accordingly, in what follows, the long century of shit begins in 1908 with Metchnikoff's Nobel Prize and the publication of his *The Prolongation of Life: Optimistic Studies* and culminates in 2008 with Alexander Khoruts's revival of FMT therapy as a means to treat antibiotic-resistant infections.

Between Metchnikoff and Khoruts, the long century of shit is characterized by a transformation in shitty thinking, in which specialized contact with waste and the microscopic life it contains becomes a source of life on grander scales as well. The fact that Khoruts revives, rather than discovers, this practice is a historical detail worth lingering over. In *I Contain Multitudes*, Ed Yong notes that fecal transplants "have been taking place on and off for at least 1,700 years," with the earliest written references to their use dating back to "fourth-century China" (230). Before Khoruts, the treatment was "rediscovered" by Ben Eiseman, Chief of Surgery for the Denver Veteran's Administration Hospital. Eiseman and his colleagues successfully treated four patients with pseudomembranous enterocolitis with the "simple yet rational therapeutic measure" of a fecal enema (Eiseman et al. 859). They subsequently published their findings as "Fecal Enemas as an Adjunct in the Treatment of Pseudomembranous Enterocolitis" in the 1958 edition of the journal *Surgery*.

The timing of Eiseman's article and the reaction it garnered are both vitally important to the work I am doing in this chapter. Eiseman's midcentury foray into these treatments occupies the exact midpoint between Metchnikoff and Khoruts, fifty years after Metchnikoff's *Prolongation of Life* and fifty years before Khoruts's prolongation of Rebecca's life. Moreover, despite the promising results Eiseman reported in "Fecal Enemas," their therapeutic use was

⁷ According to the Mayo Clinic, pseudomembranous colitis refers to "an inflammation of the colon associated with an overgrowth of the bacterium Clostridium difficile (C. diff)" that can "quickly progress to a fatal disease if not treated properly." In "Fecal Microbiota Transplantation – Early Steps on a Long Journey Ahead," Alexander Khoruts reports that the mortality rate for this "dreadful disease" was "nearly 75%" in the 1950s (199).

quickly forgotten. Though initially promising, the enema treatment was quickly supplanted by vancomycin, an effective antibiotic that appeared on the market the following year (Yong 231). I approach Eiseman's failure to establish FMT treatments in 1958, and Khoruts's success fifty years later, as a function of the slow evolution in social attitudes toward waste and its positive potential.⁸ Accordingly, between the three medical texts Metchnikoff, Eiseman, and Khoruts provide, this chapter takes up three narratives of waste as well in order to show how the literary is endlessly wrapped up in the way that waste and its potential are imagined. Literature permeates the long century of shit in interesting, integral ways. Metchnikoff opens *The* Prolongation of Life with a rejoinder against the depiction of the aged in Dostoevsky's Crime and Punishment (2) and devotes five later chapters to an analysis of Goethe's Faust to ground his theory of scatological pessimism and its biological impact. Similarly, the literary allusion in Ed Yong's title emphasizes the role literature continues to play as an interpretive lens for changing scientific paradigms that cast human life as an assemblage of familiar and foreign actants, rather than the "pleasant fiction" of the singular subject (Yong 5). Thus, my methodology in this chapter is to view fiction as neither reaction to nor instigator of new medical perspectives on waste, but instead to consider the two sources as endlessly wrapped up in and responding to an evolution in the way that people think about feces after the dawn of the 20th century.

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⁸ Eiseman's obituary in the *Denver Post* celebrated him as "a surgeon, teacher, researcher, and mentor to generations of physicians" and lists him as the author or co-author on "over 450 scientific papers" over the course of his career. It is interesting that neither this memorial nor the much longer one published in the *Journal of Trauma and Acute Care Surgery* mentions his early exploration of the possibilities of this treatment, especially given that the medical potential of FMT was very much in vogue by the time of his death in 2012. It is of course unfair to remember Ben Eiseman as a failure, and I hope that this chapter makes it clear that the "failure" I refer to here as his is better attributed to an incomplete transformation in cultural perspectives on waste that would be necessary for the adoption of a treatment regimen as unorthodox as FMT. As a final note, Eiseman was remembered as "a dedicated outdoorsman," and I would like to suggest the ecological perspective this implies as perhaps constructive of his early willingness to see the communal benefits of fecal transplants. In Chapter 2 of this dissertation, I take up the depiction of the human body in ecological terms through a construction I call the fecological body.

Accordingly, this chapter unfolds as a loose assemblage of six stories told about guts, microbes, and excrement across the long century of shit. In the first, I explore Metchnikoff's text in greater detail in order to parse its groundbreaking reconsideration of bodily waste as a temporal site in greater detail. I then pair *The Prolongation of Life* with Aldous Huxley's *After* Many a Summer Dies the Swan (1939), which invokes Metchnikoff directly as part of its satiric condemnation of quests for longevity without morality. A brief foray into Eiseman's essay provides some conjecture for the fecal enema's brief appearance and subsequent disappearance in 1958, after which I explore the bowel movements that allow Christopher Isherwood's protagonist George to stomach his grief in A Single Man (1964). Isherwood's novel is further notable for continuing the line of descent from Metchnikoff to Huxley, given that A Single Man takes up Huxley's novel as an explicit intertext while also imagining alternate temporalities that, for the protagonist George, begin on the toilet. From there, I leap to Greg Egan's 1994 novel Permutation City to show how the physical embeddedness of intestinal environments points toward new possibilities of temporal boundary crossing as well, before ending with Khoruts. Across these sections, I trace the resistance to and gradual acceptance of intestinal hybridity, repeatedly focalized through excrement, as constitutive of human identities. One of the legacies of Metchnikoff I hope to establish in this chapter is the gradual weakening of the human "I" in recognition of the microbial "we," which I find in increasing force as the century progresses. These texts are spaced roughly evenly between 1908 and 2008. This is by design; through these texts, I hope to show how the seed of fecal futurity blossoms over the course of the century.

My hope, in taking this expansive approach to the history of waste, is to show how the approach to scatology I am taking has deep roots and wide range. There is a tendency, however

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⁹ Huxley's novel was published in Britain under the shortened title *After Many a Summer*. I am using the American title for consistency with Isherwood's references to the text by that name throughout *A Single Man*.

unjust, to treat any discussion of shit as always sudden and rarely welcome. There is a similar tendency to go a step further and compare the sudden and unwelcome to shit; in truth, I first wrote that joke myself here in the first draft of this chapter. But what I have to offer instead is a scatological methodology that thinks about excrement as a deep rumbling in the guts of larger structures of thought, that, if initially unpleasant, is powered by a palpable, embodied feeling of necessity. That rumbling begins in 1908 with Élie Metchnikoff.

1908: The Prolongation of Life: Optimistic Studies (Metchnikoff)

1908 was a banner year for human excrement. Adolf Loos published his manifesto "Ornament and Crime," and with it came his insistence that a "country's culture can be assessed by the extent to which its lavatory walls are smeared" (19). In this same year, Sigmund Freud published his short essay "Character and Anal Eroticism," where he posits a connection between patients of psychoanalysis who are "especially orderly, parsimonious and obstinate" and the "comparatively long time [these people took] to overcome their infantile incontinentia alvi [faecal incontinence], and that even in later childhood they suffered from isolated failures of this function" (294). Loos and Freud both orient the excremental gaze toward the past, recognizing shit's indexical function as a sign of time passing within the body. Excrement operates as the material residue of something consigned to the past. In its base materiality, shit shows what it is no longer. Thus, Freud can look backward from the orderly and obstinate not only to their childhood, but to deep histories and archaic patterns that reveal themselves in the anal erotic's attraction to feces. The invitation to kiss one's ass is, Freud notes, "used to-day, as it was in ancient times" (296); similarly, the equation of shit and money goes back to "archaic modes of thought" and "ancient civilizations" (296).

of *The Prolongation of Life: Optimistic Studies*, he and Paul Ehrlich, his longtime collaborator at the Pasteur Institute, received the Nobel Prize for Physiology or Medicine in recognition for their groundbreaking work in human immunity and the cellular transmission of disease.

The Prolongation of Life expands upon the pair's earlier work. Metchnikoff's preface to the 1908 text dubbed it the "sequel" (xviii) to his 1903 treatise *The Nature of Man: Studies in Optimistic Philosophy*, which took an inherently comparative approach to biological and anatomical study.

The Nature of Man probed the animal origins of human bodily structures in search of "a happier human life" (PoL xvii). By The Prolongation of Life, Metchnikoff arrived at the materialist conclusion that the capacity for happiness in a lifetime increases with the length of that lifespan; hence, his 1908 work combines comparative anatomies of humans and other critters with the immunological work for which he received the Nobel in order to find solutions to human mortality in the animal world.

Given these influences, *The Prolongation of Life* adopts an unusual methodology in its response to the question of human longevity. Metchnikoff asks why the human lifespan is so (relatively) short. His comparative mechanism relies on some complicated mathematics related to ratios of total lifespan to the period of growth. This allows him to cite the mouse as being longer lived than the average human being, despite the mouse's substantially reduced years of life. He ultimately reaches two related conclusions regarding longevity within the animal kingdom: first, that "there is something intrinsic in each kind of animal which sets a definite

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¹⁰ Portions of Metchnikoff's Nobel laureate speech are cited in the second chapter of this dissertation.

¹¹ My use of "critters" here follows Donna Haraway's usage of the same in *Staying With the Trouble: Making Kin in the Chthulucene*. She turns to the American colloquialism for "varmints of all sorts" to refer "promiscuously to microbes, plants, animals, humans and nonhumans, and sometimes even to machines" ("Introduction" n. 1). See Chapter 4 for a more detailed description of Haraway's text, particularly her concept of kinship among the various critters she lists.

limit to the length of years it can attain," and, second, that longevity also has "a character which can be influenced by the environment" (43). Metchnikoff's dual insistence on an intrinsic environmental factor determinative of critters' lifespans points to the guts. In *The Nature of Man*, he identified intestinal putrefaction to be a major source of disease, and by *The Prolongation of Life* the same factor is found to be the "cause of evil" within the aging body (68). Metchnikoff assures his reader that his is a "just inference that the duration of life of mammals has been notably shortened as the result of chronic poisoning from an abundant intestinal flora" (72).

Gut flora, of course, do not only live in shit, but Metchnikoff is explicit about locating them there as he contemplates their role in the human lifespan. His theory of "chronic poisoning from an abundant intestinal flora" emphasizes both the duration and quantity of microbial contact. The human body, Metchnikoff argues, spends an inordinate amount of time in contact with its feces. To some degree, he attributes this to its mammalian origins as part of his theory that "the large intestine has been increased in mammals to make it possible for these animals to run long distances without having to stand still for defæcation. The organ, then, would simply have the function of a reservoir of waste matter" (65). He further notes that the problem of this extended contact is exacerbated by the flourishing communities that dwell within said reservoir. "When the fæcal matter is free from microbes," he writes, "as is the case with the meconium of the fætus or new-born infant, it is not a source of danger to the organism" (69). ¹³

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¹² I make no claims about the validity of Metchnikoff's science; in fact, it is worth noting that even Metchnikoff's defense of this theory is lukewarm at best. He writes, "My theory of the origin of the mammalian large intestine is intrinsically probable" (66).

¹³ Permit me to digress in celebration of meconium as a critical object. Meconium refers to the dark, sticky, and odorless stools a baby passes in the first hours and days of her life. It may be the only thing that human bodies produce alone, and the window for its creation is exceptionally narrow. New parents are told to expect diaper changes to get looser and lighter in color as the baby's gut quickly becomes populated outside of the sterile environment of the mother's womb. The progress from meconium to infant stools is presented as one of the first milestones in a baby's development after birth, which signals the degree to which what we recognize as healthy human life is inherently and vibrantly symbiotic. For reasons that the reader of this dissertation may find self-evident, there have been few studies of this topic, particularly within the humanities, and I have neither the time nor

This would all seem to confirm the long-standing association of shit and death; indeed, there is no denying Metchnikoff's explicit equation of the two. However, it must also be noted that his prescribed remedy establishes a correlation between a long life and the frequency of defecation; that is, *The Prolongation of Life* expands the human future not by ignoring the excremental body but by indulging it. This represents a fairly radical change from the way that Freud, Loos, and their precursors think about shit, imbuing waste with the promise of tomorrow rather than seeing it solely as a sign of the past. Metchnikoff, as the sub-director of the Pasteur Institute and father of immunology, calls it "clear... that regular activity of the bowels, increased by the occasional use of purgatives, must diminish the formation of intestinal poisons, and therefore the damage done by these to the higher elements of the body" (158). In other words: to live more, shit more.

And shit differently. In addition to reducing the amount of time that feces spend in contact with the internal organs, Metchnikoff devotes a sizeable portion of *The Prolongation of Life* to means by which to change the microbial composition of excrement in order to reduce the degree of intestinal putrefaction and increase the length and quality of life. After a brief survey of cultures that regularly consume soured milk, including Egyptian leben raib, Central Asian koumiss, and prostokwacha and kephir of Russia, Metchnikoff concludes that the consumption of lactic microbes that dwell naturally in these foods counteract the poisonous attributes of internal excremental contact; as such, he recommends the ingestion "either of soured milk prepared by a group of lactic bacteria, or of pure cultures of the Bulgarian bacillus" (182).

the space to correct that here. My enthusiasm for this topic is no doubt due to the fact that my daughter was born while I was writing this dissertation, but I will note, in closing, that this footnote is at least a better place to reflect on these thoughts than the hospital recovery room.

Cultivating intestinal communities of these microbes "must at the same time postpone and ameliorate old age" (182).

Metchnikoff's prescriptions instantiate a new perspective on bodily waste, particularly their temporal element. The pronouncement of bowel movements with increased regularity does position feces as a source of bodily decay, but in the same breath it establishes a route into the future by means of new excremental practices. More importantly, Metchnikoff trains his Nobel-recognized microbiological eye on the lively character of shit. Were his recommendations solely composed of means to avoid internal contact with feces, it might be easier to argue in favor of the old, backwards-looking perspective on the bowels, but his preference for soured milk reiterates that there are forms of feces that are better suited to long life than others. In fact, Metchnikoff imagines this as a point of possible contention among his readers. "A reader who has little knowledge of such matters," he writes,

may be surprised by my recommendation to absorb large quantities of microbes, as the general belief is that microbes are all harmful. This belief, however, is erroneous. There are many useful microbes, amongst which the lactic bacilli have an honourable place.

(181)

It is important to note the degree to which Metchnikoff's excremental optimism is tied up in the link between excrement and microbial life. Such a connection allows him to deflect the harmful bodily impacts of excremental contact from shit onto the microbes that dwell within it, which destabilizes previous identifications of excrement as base abject matter composed of nothing but itself. In the same breath, Metchnikoff's identification of microbes as potential saviors as well as sinners within the body casts excrement as a possible site of hope within the body. This is the optimism Metchnikoff claims in his subtitle. It invokes a scientific belief in qualitative

improvement of the embodied human experience, and it is absolutely essential that Metchnikoff puts neither heart nor head but guts at the core of his optimism. Conceiving of excrement in this way represents a fundamental shift. By distinguishing between kinds of excrement based on the forms of life they contain, Metchnikoff replaces the generalized taboo against excrement with a delineation between harmful and healthy forms of shit, the latter of which he finds intimately bound up in the new futures he traces for human bodies and lifespans. Indeed, I rely on Metchnikoff's future-oriented perspective on the alimentary canal as the originary moment for the hundred years of shit around which the chapter is organized.

1939: After Many a Summer Dies the Swan (Huxley)

Thirty-one years after *The Prolongation of Life*, Aldous Huxley took up the notion of fecal futurity in his 1939 novel *After Many a Summer Dies the Swan*. Though largely ignored among Huxley's corpus, *After Many a Summer Dies the Swan* is best celebrated for its satiric and didactic qualities. Huxley follows the efforts of the eccentric millionaire Jo Stoyte to achieve enlightenment. In search of a philosophy to adopt as his own, Stoyte assembles the characters of the novel, among them the scientifically minded Dr. Obispo, whose work promises to unlock the secrets of longevity. Obispo, together with the others, ultimately uncovers the key to immortal life, though not youth, in the Fifth Earl of Gonister, alive at 201 years old due to the carp intestines he devours for the life-prolonging gut flora they contain. Huxley lampoons Stoyte's ignorant pursuit of longevity without goodness, and as he does so moralizes profusely about the development of intelligence and good will alongside bodily fortitude.

These are not idle critiques; rather, they emerge in response to health trends that became immensely popular in the years following Metchnikoff's Nobel prize and intestinal health

treatises. Though Metchnikoff's conclusions were unprecedented and his regimen unorthodox, "an international business" nonetheless emerged selling milk-souring germs to meet the public demand to follow his example (Vikhanski 172). The brisk trade and health regime Metchnikoff's work inspired indicates that excremental perspectives were mutable on broader, popular scale, and not just an academic curiosity. As Yong notes, the health claims Metchnikoff made regarding the use of purgatives for more frequent bowel movements "started a fashion for colostomy" (37). Paul Spinrad notes that the beginning of the 20th century, during which Metchnikoff's writings were published and popularized, saw "health-obsessed American focus[ing] increasingly more energy on prompt defectation, relying on enemas, medicines, and even surgery" (24). These medical interventions took Metchnikoff's principles and pushed them to further extremes. Metchnikoff followed his own suggestions, drinking a glass of soured milk every day until his death, ¹⁴ but in his wake bodily wastes moved even closer to the center of questions of health.

Spinrad's *Guide to Bodily Fluids* is particularly helpful in conceptualizing the early years of the century of shit that follow Metchnikoff.¹⁵ Throughout the 1920s, "enemas achieved fad status" (25), and by 1930 with the publication of *Banish Constipation: A Layman's Guide*, W.H. Graves presented defectaion as more determinative of good health than proper diet. Spinrad

¹⁴ Biographers of Metchnikoff do not fail to speculate on his consumption of sour milk and its possible effect on his own longevity. Metchnikoff's daily habit is cited by Yong, Enders, and Vikhanski, among others. We might take the ubiquity and specificity of these references as proof that the fascination with microbial contact as a path to life continues unabated even among modern commentators.

¹⁵ Though Spinrad does not cite Metchnikoff by name, he attributes a decades-spanning fad interest in medical enemas and mass-market laxatives to John Kellogg's texts *Colon Hygiene* and *Auto-Intoxication or Intestinal Toxemia*, the latter of which appeared in 1918, relying explicitly on Metchnikoff's work. This is the same John Kellogg who would go on to found the cereal giant that still bears his name. Through his position as sanitarium doctor, Kellogg developed an interest in the gut-regulating benefits of bran, which led to the creation of Corn Flakes and other products for which the company continues to be known. I mean for this to serve as a reminder that the changing perspectives on waste mapped in this chapter cast wide ripples in fields that, at a cursory glance, seem only tangential to excrement.

notes that the Great Depression not only failed to slow the sales of Ex-lax, which "was estimated to have sold 40 million boxes...in a single year," but also that the dearth of radio sponsors led broadcasters to a boom in national-market advertisements for laxative products sporting such taglines as "If Nature forgets, remember Ex-Lax" and "Darling, if you're constipated, take Fleischmann's Yeast" (26). Things reached a head in 1935, when William Paley, the president of CBS, prohibited the sale of laxative ads as being "socially unacceptable" on his stations (26). Those advertisers simply moved their sponsorships to NBC and continued unabated.

The tension between CBS and NBC over the social acceptability of laxative products is consistent with the transformation in fecal perspective that I attribute to the century following the publication of *The Prolongation of Life*. Paley's veto reflects the longstanding distaste for excremental visibility and references, even veiled, to the practice of defecation. On the other hand, the incredible sales volume that these products enjoyed in the 1930s as a direct result of changing perspectives on their health impact finds those same mores to be mutable. Moreover, the vast popularity of laxative and probiotic remedies for improved health, directly traceable back to Metchnikoff, speaks to the profound influence that the microbiological revolution had on attitudes toward shit. By making the connection between excremental matters and health, Metchnikoff and his fellow pioneers of hygiene crafted a direct connection between feces and the future. By regulating health either by increasing the body's natural frequency of bowel movements or by cultivating specific communities in the gut, adherents to these health fads embraced the idea that contact with the microbial vibrancy of shit would have positive temporal outcomes.

Given this, it is perhaps not surprising that Huxley's novel explicitly rebukes

Metchnikoff's work. The monomaniacal Obispo invokes the sub-director of the Pasteur Institute

by name as he shows off the carp he studies for their long lifespan, remarking that

Old Metchnikoff had asked those [same] questions and made a bold attempt to answer. Everything he said happened to be wrong...And yet almost certainly not nearly so wrong as people had thought. Wrong, yes, in supposing that it was all a matter of intestinal stasis and auto-intoxication. But probably right, in thinking that the secret was somewhere down there, in the gut. Somewhere in the gut. (Part I, Ch. V)

The repeated insistence that the secret "almost certainly" and "probably" lurks "somewhere down there, in the gut" suggests that, by the time of the novel's composition, this future-oriented perspective on the guts and their contents was becoming entrenched enough that Huxley's contestation of it must unfold on philosophical rather than practical grounds. Though he dismisses the specifics of Metchnikoff's optimism for an intestinal future, ¹⁶ what is most telling here is that Huxley can assent to their general potential so easily. By 1939, the gut is at least legible enough as a source of the future that its role in Huxley's satire fades into the background as prerequisite knowledge. ¹⁷

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¹⁶ Huxley's prose suggests a familiarity with the specifics of Metchnikoff's writing that has, in previous scholarship on the novel, been overlooked in favor of the literary references that also abound throughout the text. James Sexton's essay on "Fictional and Historical Sources for *After Many a Summer*" shows this imbalance in favor of the novel's literary intertexts in the suggestion that "[e]xactly from what source Huxley derived his idea that carp are long-lived is unclear" (132). Sexton then offers a number of plausible suggestions that nonetheless betray his own unfamiliarity with *The Prolongation of Life*, in which Metchnikoff offers "no doubt...that the life of carp may be very long indeed" (50).

¹⁷ Lest it be said that here I am describing microbial life rather than excrement, I want to be clear about the inextricability of one from the other. Metchnikoff's emphasis on excrement as the privileged site of microbial life, even within the intestines, makes it difficult to read any mention of the guts that is indebted to his work without seeing them for what they contain. Subsequent medical texts further elide the difference between guts and shit. Groundbreaking research published in the journal *Nature* in 2011 reports that there is a "limited number of well-balanced host-microbial symbiotic states" and traces this new knowledge to "22 newly sequenced faecal metagenomes" (174).

Instead, his critique probes at the limits of Metchnikoff's optimism. In that regard, the Earl's ongoing bodily decay operates effectively as a problematic figure for the unbridled future-focus of excrement. By the time the Earl appears in the flesh alongside his similar aged housekeeper, their advanced years have withered their appearance into something simian and monstrous:

He sat hunched up, his head thrust forward and at the same time sunk between his shoulders. With one of his huge and strangely clumsy hands, he was scratching a sore place that showed red between the hairs of his left calf... Above the matted hair that concealed the jaws and cheeks, blue eyes stared out of cavernous sockets. There were no eyebrows; but under the dirty, wrinkled skin of the forehead, a great ridge of bone projected like a shelf. (Part III, Ch. II)¹⁸

Obispo's companions are horrified, but he celebrates the Earl's visage as a glimpse into a human future. He is a "foetal ape that's had time to grow up" and the only thing that has happened to him is "[j]ust time." Huxley obscures virtually any detail of the woman other than distorted visual cues of her femininity, which include "a face only slightly hairy" and "pendulous and withered dugs" that fill her visitors with "horrified disgust." Obispo admits that he "doesn't know how old the female is," switching into an anthropological or even zoological register to refer to her as a specimen in a way that is quite at odds with his description of the Earl using his title. ¹⁹

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¹⁸ All subsequent references to *After Many A Summer Dies the Swan*, including footnotes, are taken from this same chapter; as such, further in-text references to Part III, Ch. II are omitted for the sake of brevity.

¹⁹ This imbalance in tone reflects the gendered disparity in depictions of aging; though aged bodies of any gender are often treated as objects of disgust, this aversion is often more acute in response to elderly women. Given that even the narrator's description of the two reflects this imbalance in tone, as the housekeeper is shortly reduced to the "creature in the ulster," it is hard to attribute the presence of these elements solely to Huxley's satire. My emphasis on the Earl in this chapter is meant to address Huxley's focalizing of the description and means of longevity through that character; a more nuanced engagement with the gendered disparity in the way these two enter the narrative is better suited to a later project.

Though the imagery may suggest regression rather than progress, Huxley's refusal to entertain the idea of eternal youth actually represents an important qualification to the way we think about any path to the future that originates in excrement. Because this futurity originates in the guts and is thus endlessly wrapped up in digestion and decay, the very idea of a persistent state must be inimical to its intestinal source. Huxley's narration, emphasizing the grotesque strangeness of the Earl's "clumsy hands," "cavernous" features, and "dirty, wrinkled skin," effectively wonders whether this is a future we *want*, but in doing so Huxley settles for questioning the pursuit, rather than the possibility, of the type of longevity that threatens to emerge from the guts.

Huxley's portrayal of the Fifth Earl of Gonister's centuries-spanning life as a monstrous transformation suggests an incommensurability between microbial contact and human identity. As the novel ends, the Earl lives his third century of life as something *other than* human. He seems no longer to be capable of speech, but instead communicates "with a ferocious yell" using "the guttural distortions of almost forgotten obscenities." Even the perennially impressionable Mr. Stoyte is unable to entertain the idea of an intestinally-prolonged life without recognizing the fundamental change such method would require. Viewing the Earl, he asks, "How long do you figure it would take before a person went like that?" and then, "in a slow hesitating voice," insists:

I mean, it wouldn't happen at once ... there'd be a long time while a person ... well, you know; while he wouldn't change any. And once you get over the first shock – well, they look like they were having a pretty good time. I mean in their own way, of course. (ellipses in original)

Stoyte' focus on the process of change throughout his self-assurance, coupled with the contrast between how long "a person" might last unchanged by this regimen and the qualification that, once transformed, the Earl and his housekeeper can only experience pleasure "in their own way," suggests that extending human life in this manner initiates a break between "human" and "life." Huxley insists on a type of inherently limited embodied humanity that cannot survive the type of intestinal contact needed to write Metchnikoff's medical prophecies into being. Contact with the guts in the manner prescribed is portrayed, then, as fundamentally inimical to human identity, which casts the "properly human" human being as singular by design and short-lived by consequence. That is, the intestinal communality required to follow the excremental path to longevity is shown to be diametrically opposed to the model of the human as living in spite of, rather than because of, the microscopic life it hosts.

All of this goes to show how truly revolutionary Metchnikoff's insistence on symbiosis as fundamental to human life was when voiced at the turn of the century. Just as Huxley's Obispo attributes the startling change in the Earl and his housekeeper's appearances to "[j]ust time," it seems probable that the same explanation accounts for the slow progress of decades that would be necessary for these ideas to gain traction among popularly held theories of embodiment. To endorse excremental longevity requires a willingness to replace the singular subject with the inherent plurality of the symbiotic gut, and *After Many a Summer Dies the Swan* serves well as a reminder that such fundamental changes are rarely fast-moving. Though the texts I consider in what remains help to give this notion shape and push it forward, we ought also to consider the importance that "just time" plays in the emergence of the gut and its flora as active players in the imagination of human possibilities. This is, after all, the driving force behind the temporal frame of the century around which this chapter is organized. I am not just

interested in how excremental contact reverses its temporal associations to become oriented toward the future; I want also to pay attention to the way that this new perspective unfolds in time, a rumbling in the guts that grows louder and more urgent with the passage of years and decades.

1958: "Fecal Enemas as an Adjunct in the Treatment of Pseudomembranous Enterocolitis" (Eiseman)

In the November 1958 issue of the journal Surgery, Ben Eiseman and three of his colleagues from the Denver Veterans Administration Hospital published a short medical brief that, as Eiseman recalled later in a personal email to Alexander Khoruts, "made a small splash" (quoted in Khoruts, 199). "Fecal Enema as an Adjunct in the Treatment of Pseudomembranous Enterocolitis" presents four case studies of patients who, experiencing a range of symptoms including bloody diarrhea, vomiting, and fever related to micrococcus pyogenes, an antibioticresistant staphylococcus infection, received "[r]etention enemas composed of normal feces suspended in saline" (859). Though the sample size is almost unfathomably small for a clinical case study, in all four cases Eiseman and his colleagues report remarkable and nearly instantaneous results. The first patient showed "marked improvement in his general condition and his bloody diarrhea ceased" following an initial fecal enema (855); his stool cultures on the following day were clear of micrococcus, and after receiving a second enema he was "discharged from the hospital 10 days later, completely asymptomatic" (855). The second patient, who had been "desperately ill" (857), received three fecal enemas over the course of two days; his infection "had entirely disappeared" within four days of the first treatment. The third presented "a milder variety" of staphylococcal enterocolitis that responded positively to a single enema

(857), and the fourth patient "made an uneventful recovery" from "[s]evere and life-threatening staphylococcal diarrhea" following her enema treatment (858).

It is not altogether clear where Eiseman and his colleagues came up with the idea of treating these infections with feces, though their logic is sound:

Because the mortality rate from pseudomembranous enterocolitis remains distressingly high despite the use of modern supportive measures and antibiotics effective against *Micrococcus pyogenes*, an attempt was made to re-establish the normal intestinal bacteria flora by the administration of normal feces into the colon of patients with the disease. (854)

Though the rest of essay is rigorously citational, the co-authors present their clinical hypothesis as more of a premonition than anything else. They base their treatment regimen on "the fact that staphylococcal overgrowth occurs when other organisms disappear" and the hope that "reintroduction of the bacteria, viruses, and bacteriophage normally found in the colon might reestablish the balance of nature" (854). A half-century after the publication of "Fecal Enemas," Eiseman summarized the genesis of their trial even more blithely: "Those were days when if one had an idea, we simply tried. It seemed to work and I wrote it up" (quoted in Khoruts, 199). Eiseman and his fellow surgeons are equally opaque on matters as central to their therapeutic matter as the source of the healthy stools they used. The materials within the fecal retention enema are only mentioned in the first case study, with the only details being that the enemas were administered "using donor feces from a normal subject who had received no antibiotics during the previous several months" (855). Even within a clinical context, in which four respected members of a major hospital's Departments of Surgery and Medicine collaborated on a

medical innovation that suggested a 300% improvement in mortality rates, it would seem that explicit discussions of fecal materiality remained verboten in 1958.

Nevertheless, despite the ambiguities and clinical limitations of the study, Eiseman's results were incredibly promising. Given this, the essay's closing suggestion that "this simple yet rational therapeutic method should be given more extensive clinical evaluation" seems wholly rational itself (859). And at first, this urging for wider adoption of the method was heeded, though Alexander Khoruts summarizes the "small splash" Eiseman made with his enemas in a single sentence of his introduction to the special issue of *Gut Microbes* on FMT: "fecal enemas were initially rapidly adopted in the care of pseudomembranous colitis in some centers following the Eiseman publication, only to retreat into near obscurity after introduction of vancomycin" (199). I want to linger at this point, halfway through the century of salutary shit, and draw out the impact of this preference for drug over dung, particularly as a barometer for thinking about the place of excrement and gut microbes within a healthy individual and collective body.

It should be clear that the clinical turn towards vancomycin amounts to a rebuff of the fecal alternative Eiseman and his colleagues illuminated with their paper. The role of widespread antibiotic overuse in the development of serious infections had, at the very least, been strongly suggested by 1958; as Eiseman and his co-authors write, "[m]ost of the recently reported cases [of these infections] have followed the use of oral broad-spectrum antibiotics, suggesting that the intestinal flora was thus altered to permit an overgrowth of antibiotic-resistant *Micrococcus pyogenes* (staphylococcus) within the gut" (854). Though they further note that "the relationship of these drugs to the disease is debatable inasmuch as the incidence of the disease may not have increased since their use" (854), the phrasing suggests a suspicion that this relationship only awaits clinical confirmation. Eiseman's demurral, then, originates in professional standards

rather than personal conviction. Moreover, Rustam Aminov's brief history of the antibiotic era reminds us that "some observations suggested that bacteria could destroy [penicillin] by enzymatic degradation" as early as 1940 (3). Given this, the adoption of another antibiotic to do the work that feces already did so well amounts to a statement of priority, in which the material risks of further drug use are seen as preferable to the unseemliness of excremental means of handling infections.²⁰

A recent writeup on the clinical uses of vancomycin in the Cleveland Clinic Journal of Medicine exemplifies the degree to which the single-minded preference for antibiotics as a means for treating infection operates despite obvious gaps in knowledge, self-reifying modes of logic, and outright paradoxes. The degree of casual uncertainty present even in the title of Amy Schilling, Elizabeth Neuner, and Susan Rehm's 2011 article "Vancomycin: A 50-something-year-old Antibiotic We Still Don't Understand" underscores the degree to which the use of vancomycin was and continues to be predicated on its observable antibiotic qualities outweighing other forms of ignorance that orbit around its use. It is especially telling that Schilling, Neuner, and Rehm's material history of the drug can only gesture vaguely back to its discovery 50-odd years earlier "in a soil sample from Borneo in the mid-1950s" (466).

Vancomycin's birth in the dirt and colloquial reputation as "Mississippi mud" throughout the 1950s due to the number of impurities its formulations often contained (Schilling et al. 467) speaks to the paradox at hand in intervening into microbial populations of the human body. Even

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²⁰ Given that this chapter began in 1908 with the awarding of the Nobel Prize to Élie Metchnikoff and his collaborator Paul Ehrling and has since traced the crests and troughs of the former's emphasis on productive symbiosis with certain microbes within the body, it is worthwhile to note here the role that the latter played in the widespread adoption of antibiotics as a cure-all for microbial contact of any kind. As Rustam Aminov writes: "We usually associate the beginning of the modern 'antibiotic era' with the names of Paul Ehrlich and Alexander Fleming. Ehrlich's idea of a 'magic bullet'...argued that chemical compounds could be synthesized that would 'be able to exert their full action exclusively on the parasite harbored within the organism'" (2). My work in this chapter is to show how the gut microbes in shit transformed from parasite to symbiont in the hundred years following Ehrlich's Nobel Prize.

at the midpoint of the long century of shit, the issue is less a matter of avoiding filth than of selecting a form of it to embrace over others.

Choosing vancomycin over Eiseman's fecal enemas meant committing to another round of antibiotic leapfrog, in which any new drug found to be effective against the latest strains of antibiotic infection delays payment on a deadly debt that only becomes more potent with each deferral. Making such a choice in the face of mounting evidence of the stakes of growing antibiotic overuse and resistance can only emerge from a view of the body as an inherently singular organism, for which any internal contact with microbial community would be inimical to health. As I have already shown, Élie Metchnikoff railed against this "erroneous belief" in the inherent threat of microbes fifty years earlier, but the ease with which yet another antibiotic flushed Eiseman's fecal trials out of mainstream medical use shows not only how this belief persisted but also the ongoing dangers associated with this view of the body and its treatment.²¹

None of this is meant to suggest that the problem of antibiotic-resistance would have been neatly solved had doctors adopted Eiseman's fecal protocol. I do, however, want to emphasize how the preference for ongoing antibiotic treatments over fecal enemas is wrapped up in a notion of the body as an inherently lonely place. Challenges to this sense of bodily isolation must play out along the body's digestive tract, due to the microbes that naturally and productively populate the alimentary canal.²² The guts, moreover, are not merely written in

²¹ In this case, vancomycin was quickly displaced by methicillin, which was discovered in 1960 (Newbould 109). The widespread use of methicillin in subsequent decades drove the growth of methicillin-resistant *S aureus* (MRSA) strains of staphylococcus. MRSA infections, coincidentally, are not only the main source of contemporary community-associated drug resistance, but also often lead to c-diff infections when intensive antibiotic regimens to treat the MRSA disrupts the microbiome's natural equilibrium and allows naturally occurring populations of clostridium difficile to expand unchecked. The treatment of stubborn c-diff infections, of course, would ultimately prompt Alexander Khoruts to reinvestigate excrement as a clinical medium, meaning that the avoidance of FMT as a legitimate treatment protocol precipitated a microbial arms race that would ultimately make "standard surgical care...no longer seem an ethically justifiable first treatment choice" (Khoruts 199).

²² By "naturally" here, I mean "inevitably" rather than "from the beginning." The digestive tract relies upon gut flora to function and as such creates internal conditions to attract and sustain large numbers after birth. See my previous

scientific texts. The way we understand our waste has long been shaped by the narrative purposes we put it to, and as such I turn now to two fictional texts that follow in the wake of Eiseman that show how new understandings of the body as filled with life take shape. I do not present either of the novels that follow as a causative factor for the shift in thinking about shit; rather, I propose a correlative mode of association, in which we see *A Single Man* and *Permutation City* as simultaneously reflecting and constructing the new ways of thinking about excrement that must accrue between 1958 and 2008 so that Alexander Khoruts may succeed where Ben Eiseman did not.

1964: A Single Man (Isherwood)

Christopher Isherwood's 1964 novel A Single Man continues the explicit line of descent from Metchnikoff's The Prolongation of Life to Huxley's After Many a Summer Dies the Swan. Isherwood puts the Huxley novel in the hands of his protagonist, the bereaved college professor George, as he attempts to navigate life following the sudden death of his partner Jim. Huxley's novel bores George's students, much to their professor's consternation, due to their reluctance or inability to engage with the Huxley text's literary allusions. George berates the class for ignoring the full provenance of Huxley's title, which is, "of course, a quotation from Tennyson's poem 'Tithonus'" (Isherwood 63). His follow-up question – "by the way, while we're on the subject – who was Tithonus?" – is met with a silence that George silently bemoans as "typical" of the class: "Tithonus doesn't concern them because he's at two removes from their subject. Huxley, Tennyson, Tithonus. They're prepared to go as far as Tennyson, but not one step farther. There their curiosity ends. Because, basically, they don't give a shit" (63; italics in original). George's

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note on meconium; see also Ch. 2 of this dissertation, where I address narrative texts set inside the body that treat the alimentary canal as the privileged site of community and hybridity.

use of the colloquial phrase "to give a shit" as a synonym here for the desire to know is part of what attracts me to this novel, throughout which Isherwood explores bathrooms and bodily functions as a source of both alienation and intimacy.

Moreover, Isherwood's insistence on tracing the lineage of literary works back to their origin sources makes this moment of special interest to this chapter, which is engaged in a similar type of work. However, I focus on seeing how A Single Man's connection, through Huxley, back to Metchnikoff empowers Isherwood's exploration of the guts as a means to cross temporal boundaries. For, in a novel that reads Huxley's as closely as A Single Man does, and indeed given Isherwood's personal friendship with Huxley,²³ it is important to acknowledge that Huxley's satire claims a complicated lineage, and as such its intertextual connections point in many directions. How, I ask, can we take seriously Isherwood's reading of After Many a Summer Dies the Swan without pausing to consider Huxley's invocation of Metchnikoff-inspired gut sciences as a function of that reading? And, given that, how can we read George's irascible inability to "see how anyone can pretend to be interested in a novel when he doesn't even stop to ask himself what its title means" (63) without reflexively pausing to think differently about the "single" in Isherwood's title? For, to be sure, Isherwood's novel addresses the grief of a newly single man adjusting to the loss of his partner, but his means of coping is fundamentally grounded in new forms of scatological community, which, I argue, reflect the softening of boundaries between human identity and the human microbiome. That is, in A Single Man,

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²³ If we accept friendship as something to quantify, then Katherine Bucknell's analysis of Isherwood's diary is instructive here: he and Huxley "met at least 133 times of the next 23 years, at least 41 times alone." If we do not, then we should turn instead to Isherwood's own words written in memory of Huxley, which celebrate the "fearless curiosity [that] was one of Aldous's noblest characteristics, a function of his greatness as a human being" (*Memorial* 157).

Isherwood finds the human to be composed of many parts both internal and external, and he uses the toilet to do so.

Lavatories, after all, figure prominently throughout the novel, first and most notably as the way that George mediates his ongoing and, in the case of Jim, thwarted human relationships. Thus it is that the irritable professor, "feel[ing] a bowel movement coming on with agreeable urgency," must reach for his volume of the works of John Ruskin as "today's perfect companion for five minutes on the toilet" (17). It is first meaningful to note, perhaps, that the language of "agreeable urgency" is attributable to the same principles that sparked the misguided enema craze of the 20s and 30s; here, George noticing the strength of his urge to evacuate his bowels in positive terms suggests some fear of slow, constipated flows of waste through his body. This type of attention is consistent with reigning gastroenterological thinking that equates healthy stools with easy, but not too easy, passage, and thereby gestures to the ways that Metchnikoff's principles evolve into a mainstream consciousness of the body.

More important to the matter at hand, however, is the way that Isherwood presents George's time astride the toilet as open to companionship of any kind. In "Christopher Isherwood's Bathroom," William Ian Todd also notes that Isherwood "fram[es] defecation while reading *as* a form of communion," but he leaps from this type of excremental communion to seeing "reading the canon [as] an intimately private embodied act" (117). There is no doubt that George's intimate embodiment takes center stage in the extended bowel movement scene that opens this novel, but it is hard to think of his time in the bathroom as marked with a real sense of privacy. Though George is alone with the text of Ruskin's lectures, his vivid mental image of the Englishman's appearance and mannerisms – "Intolerable old Ruskin, always absolutely in the right, and crazy, and so cross, with his whiskers, scolding the English" (17) – nearly invokes

Ruskin's physical presence as well. George's entrance into the bathroom brings with it an expectation of companionship that finds expression in the reading matter he selects. Reading thus becomes an important element of the conversations George has with his body, a means by which he can "relax the nagging of his pyloric spasm" and "trigger the conditioned reflexes of his colon" (16), among other things.

Ruskin is not the only companion who joins George in the bathroom either. George spends twelve pages of *A Single Man* and an untold amount of Ruskin on the toilet, where he becomes capable of reflecting on the communal life he shared with Jim and subsequently lost following his death. I take his location and activities during this reflection to be constructive of their quality; it is, after all, while sitting on the toilet that George reflects longest on the happy life he and Jim shared as they made a place for themselves in "our own island" on Camphor Tree Lane (20). Excrement operates within *A Single Man* as a means to assess and maintain the health of bodily and social relationships. It is for this reason that George structures his social contacts around the bathroom. His tenure on the toilet comes to an end with a phone call. George's response – "Damnation. The phone. Even with the longest cord the phone company will give you, it won't reach into the bathroom" (29) – is strongly suggestive of prior attempts to do just that, bring the telephone into the bathroom so that his rare contact with the outside world can be dealt with from the communal throne of the commode.

The call that interrupts George's reverie comes from Charlotte, inviting him to dinner that night. Though he does not accept until much later in the day, the connection revealed in this way links George and Charlotte, establishing the friends as "another of this evening's lucky pairs, amidst all its lonely wanderers" and making George's face "flush with joy like a lover's" at the prospect of company (114). When, to use the friends' pet names for another, Geo finally arrives

at Charley's, another bathroom perspective allows him to imagine the lives of her neighbors as well. Climbing Charlotte's stairs, George receives "an intimate glimpse of domestic squalor through [her neighbor's] bathroom window" (118). I simply refuse to treat these examples of relationships that begin in and revolve around bathrooms as coincidental to Isherwood's purpose in *A Single Man*; rather, I see the preponderance of such material as showing a continuity between the social connections among people and the intrabody discourse within each of them as well. It is telling, in this case, that George's first contact with Charlotte for the day happens while he is "standing nastily unwiped, with his pants around his ankles" (30). Isherwood insists on finding the waft of the excremental in every relationship George sustains.

The bathroom thus becomes a place for George to commune with the world beyond his house as he defecates, which Isherwood establishes in the repeated association between "the john" and "the window" that George looks through into the neighborhood. "Sitting on the john" as his morning routine begins, "he can look out of the window" (17). Some number of pages of Ruskin later and "[s]till sitting on the john, George looks out of the window" again (22). In both cases, George finds his vantage point uniquely advantageous for reflecting on his status as the neighborhood pariah and boogeyman. He knows himself to be

The fiend that won't fit into their statistics, the Gorgon that refuses their plastic surgery, the vampire drinking blood with tactless uncultured slurps, the bad-smelling beast that doesn't use their deodorants, the unspeakable that insists, despite all their shushing, on speaking its name. (27)

Here George evinces an awareness of the monstrosity with which his heteronormative neighbors associate him, and by naming himself as "the bad-smelling beast that doesn't use their deodorants," he nods to the related association between odor and social taboo as well.

Ian Scott Todd offers a persuasive interpretation of *A Single Man* as a rebuke of "postwar germophobia [and] its relation to homophobia" ("Bathroom" 119). Such a reading courses through the pages of Isherwood's novel, and this moment is shortly joined by others that sequester George to excremental spaces in order to eject him from the social body. As George makes the hourlong drive between his home and the small liberal arts college where he teaches, Isherwood is even more explicit in invoking this specter. George finds himself thinking of a "local newspaper editor [who] has started a campaign against sex deviates (by which he means people like George). They are everywhere, he says; you can't go into a bar any more, or a men's room, or a public library, without seeing hideous sights" (26). In moments like this, Todd finds Isherwood "accus[ing] American culture of using hygienic discourse to purge itself of the symbolic waste matter that might poison its future" (119), and in this regard he is surely not wrong.

But neither is he fully right. Elsewhere in this dissertation, I articulate a power dynamic at play in the infrastructural boom during the 1960s, 70s, and early 80s – a period that covers Isherwood's writing and publication of *A Single Man*, incidentally – in which the expansion of sewage systems brought with it a division in the way that excrement was thought of publicly. I show how the microbial liveliness of sewage was embraced as a form of mobility and thus power by the white, heteronormative institution, while its association with filth and inert matter was maintained in relation to marginalized racial communities that often bore the ecological and economic brunt of infrastructural advancement.²⁴ We can see a similar dynamic unfolding in *A Single Man*, but with the important difference being that Isherwood anticipates the bait-and-

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²⁴ See Chapter 3, where I discuss midcentury narratives in which white characters flush themselves through sewer lines as a means to shore up their privileged access to social spaces. In *A Single Man*, George reflects directly on the ways that the postwar boom in new construction threatens to displace him, railing against the tracts of new houses that "are being opened up as fast as they can be connected with the sewers and the power lines" (42).

switch and claims the full range of excremental powers as well. "Your exorcism has failed, dear Mrs. Strunk," George soliloquizes to his busybody neighbor, "squatting on the toilet as he does so" (29). I want to make clear that George's posture is fundamental to the power he claims against Mrs. Strunk; squatting on the toilet gives him the excremental powers to disrupt Strunk's vision of the neighborhood and assert his place within it.

William Ian Todd singles out *A Single Man* as an example of what he calls "excremental modernism," which is defined by "the radical impulse to take up and consider the leavings of modern culture – its waste and its dirt – and to throw them on the page" ("Dirty Books" 209). Elsewhere, Todd focuses on Isherwood's adoption of these excremental tactics in order to bemoan the passing of high modernism and its succession by middlebrow tastes. He reads *A Single Man* as Isherwood's elegy for "the queer attraction to dirt shown to have no place in the postwar American culture that he characterizes as germophobic, heteronormative, and contemptuous of all things thought to be outmoded or wasteful" ("Bathroom" 111). In this, Todd insists that "Isherwood's gaze remains firmly directed toward the past rather than toward any possible future for excremental modernism's revival" (112). I am not so sure. Rather, I think that Todd errs in focusing on Isherwood's literary perspective to the exclusion of other manifestations of the author's excremental tactics throughout the text. These tactics must attune us to the resonance of culture that finds itself among the denizens of George's guts, in a way that does seem to challenge the ability of the novel's titular single man to truly be alone.

Octavio Gonzalez provides an analysis of Isherwood's "ascetic ideal of impersonality," referring to "the urge to suspend or violate the self's personal integrity, to transcend the self, even evacuate personality, through means such as ritual [and] performative displays of self-abnegation" (760). Gonzalez focuses on scenes from the novel that take place outside of the

bathroom – in George's classroom, his car, and the Starboard Side bar – as moments that "project the ego-divesting ideal of impersonality that is signally oriented to an ethics of queer relationality" (769), but I see Gonzalez's self-abnegation in George's defecation, in which the bounds of the ego are loosened from within and without. My pivot, then, is to suggest the ways that this ideal operates in unison with Todd's excremental modernism to theorize the diffuse self George pursues through his bowel movements that exceed the singular.

After all, A Single Man begins by showing how the gut and brain coordinate to assemble the fiction of a cohesive self. As dawn breaks, "[t]hat which has awoken...lies for a while staring up at the ceiling and down into itself until it has recognized I, and therefrom deduced I am, I am now" (9). Isherwood objectifies the body here, such that the "I am" that emerges does so at odds with the assemblage "itself" that performs this act of recognition. Isherwood articulates the various bodily systems, starting with the vagus nerve of the gastrointestinal tract followed by "the cortex, that grim disciplinarian" (9); the ordering here is instructive, 25 as George's actions throughout the novel are often undertaken in response to compulsions he feels in his gut, as when his body "levers itself out of bed" toward the bathroom (10).

It is in this bathroom that George ultimately composes himself as George. Quite unlike Huxley's novel, which ends with the fear of devolution into an animalistic state like the Fifth Earl of Gonister and his housekeeper, Isherwood starts by seeing his protagonist as a "live dying creature" (10-11) and imagines his activities in the bathroom as necessary components for assembling his various parts together into an assemblage that "knows its name. It is called

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²⁵ Not to mention anatomically accurate, at least according to new studies of the gut-brain axis. Mayer et al. detail several types of "bidirectional signaling between the brain and the gut microbiome" (15490), which positions the gut as acting on the brain in addition to reacting to its commands. Mayer and his co-authors celebrate these discoveries as a "paradigm shift" on par with "Descartes' separation of mind/brain on the one side…and body on the other side…that has dominated Western science and medicine for hundreds of years" (15494). Part of the impetus for this dissertation project has been finding ways for the humanities to respond to the gut-brain axis.

George" (11). This is a subtle but meaningful shift away from Huxley's model of defending the singular human against the threat of pluralized identity formation; rather, Isherwood emphasizes the degree to which embodiment is always already predicated upon synergy between the body's component anatomical parts and symbiosis with the body's microbial populations. The collective fiction of George comes together when the body's physical necessities, feeling "mildly nauseated by the pylorus in a state of spasm" (10), intermix with the social obligation of acceptable behavior to define "its place among them" (11). Isherwood's addition to the excremental trajectory of this chapter and the specialized century it traces comes in his recognition of bathrooms as the privileged space for this type of contact between forms of cultural obligation. By pluralizing forms of culture here, I aim to situate bacterial cultures alongside the social norms and relationships among the humans of the novel. The result of this juxtaposition is that Isherwood's George comes to view excremental moments as imbricated with many bodies, in which he looks inward and finds a dialogue between his component parts and outward to reflect on the various ways he is, and is not, bound up with the other bodily assemblages that surround him.

Isherwood's deft adoption of anatomical language to describe the machinations of George's body throughout the day suggests that his novel thinks very differently about the role of scientific knowledge within a literary text than Huxley's did. Whereas *After Many a Summer Dies the Swan* was resolute in finding the scientific advancement of human life to be at odds with its humanistic celebration, Isherwood blends the two as a matter of routine, greatly complicating the idea that either narrative or biology fully escapes the realm of the other. This is an approach to the novel that only emerges from putting Gonzalez in conversation with Todd, so that the former's ego-divesting ideal comes into contact with the excremental orientation of the

latter. In so doing, I am trying to give a very different type of shit than Todd describes in "Christopher Isherwood's Bathroom." As Todd writes it, "[t]o 'give a shit is thus to indulge in literary and sexual pleasures unfamiliar to those masses of straight breeders whose bodies only know how to look forward to the future instead of backward at the past" (118). The irony of citing this line in a chapter that includes an extended footnote about changing my daughter's diapers is not lost on me, and I do not mean to suggest any reading of A Single Man that is inattentive to the real violence done by the pathologization and excrementalization of gay bodies. Todd ends "Christopher Isherwood's Bathroom" with a stern warning that "the most earnest attempt to channel the spirit of excremental modernism in the present can never result in anything other than a sanitized imitation" (123). This is surely true, but it also overlooks the fact that there are other excremental spirits that Isherwood can and indeed does seem to invoke in this novel. In the same way that George communes with the past from his toilet, so too does he enjoy those moments as "suspending the burden of selfhood," which Octavio Gonzalez equates with the novel's interest in "forms of 'slow life" (776). To find promise in self-abnegation by defecation requires an evolution of scatological perspectives and the hybrid role that excremental contact plays that pushes this century forward.

1994: Permutation City (Egan)

The plot of Greg Egan's 1994 science fiction novel *Permutation City* spans three ontological levels. At the highest is the physical world that most closely resembles our own. In it dwells the corporeal bodies of the novel's main characters, particularly Paul Durham and Maria Deluca, who share an interest in a computer simulation engine that enables people of sufficient means to create Copies – capitalized in the novel – of themselves and extend their lives by digital

means. Durham and Maria meet as Copies and together concoct a third nested level of existence. They create the TVC Universe, a simulated plane of existence launched within the simulation, within which Copies should be able to live indefinitely, even after the simulation running their universe is terminated, due to the precepts of "a giant cosmic anagram" Egan dubs the dust theory (Ch.12).

Much of the philosophical heft of Egan's novel comes from reflections on the relation between Copy and Original across different planes of his nested universes. Of crucial importance to the project at hand is the fact that excrement and guts become a critical means of bridging between Egan's worlds. *Permutation City* portrays a world in which shit is essential to embodied and simulated life alike. Egan uses excremental moments throughout the novel to puncture the boundaries between levels of his universe. Excrement takes on this metaleptic power at each layer of Egan's narrative;²⁶ that is, whether in the TVC Universe, or the simulation that contains it, or the physical world that contains them both, guts and the smell of shit become integral ways of imagining new forms of life and the relationships between them.

Egan highlights the bridging power that excrement wields almost immediately. The Prologue opens with one of Durham's Copies raging against his inability to protest his mistreatment at the hands of his Original. Due to his simulated environment, his options are limited: "What was he meant to do? Go on a hunger strike? Walk around naked, smeared in excrement?" ("Prologue," italics Egan's). This last option proves to be impossible, given that "[u]rine and feces production were optional – some Copies wished to retain every possible aspect of corporeal life – but Paul had chosen to do without. (So much for smearing himself in excrement)" ("Prologue"). This would seem to suggest that simulation renders bodily wastes

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²⁶ I return to this idea of excrement and its metaleptic potential, meaning its ability to instantiate breaks between narrative and physical layers, in the second chapter of this dissertation.

superfluous, but Egan insists that, even in digital form, excrement and embodiment are intertwined. Though Copies may opt out of urine and feces production, the wastes their bodies produce yet linger on some plane of existence. Rather than never existing, Durham's "bodily wastes would be magicked out of existence long before reaching bladder or bowel. Ignored out of existence; passively annihilated. All that it took to destroy something, here, was to fail to keep track of it" ("Prologue"). Presumably, shit must enter into existence in order to be magicked out of it. There must be something to ignore, to fail to keep track of. By implication, then, the language here treats the absence of waste within the simulation as less an omission than an erasure.

Egan thus insists on excrement as fundamental to lived experience of any kind. This is a substantial revision of the sanitized, shit-free human future that had been imagined in decades previous. Of crucial importance in this equation is Egan's willingness to forego the visible production of bodily wastes while yet insisting on their existence somewhere within the bodily algorithms that compose simulated life in his various nested universes. Whereas the earliest treatments of the vibrancy of excremental matter treated its role in the body as an unfortunate necessity inevitability, to be made increasingly visible by reducing the time it spends hidden in the body through enemas and purgatives, Egan flips the script, so that the interiority of shit, the very idea of it even "before reaching bladder or bowel," grounds his Copies' very ability to experience life at every ontological level.

This I want to emphasize: the production of waste in *Permutation City* is fundamental to inhabiting either physical or digital planes of existence. There is no life without waste, which Egan makes perfectly clear through the dissolution of his supposedly eternal TVC Universe. Part Two of the novel takes place in the titular Permutation City, the hub of life within the TVC

Universe that Durham and Maria create together and populate with Copies of Copies. Maria's Copy is awoken after lying dormant for millennia due to the emergence of intelligent, non-Copy life elsewhere in the TVC Universe. The new insectoid lifeforms, dubbed the Lambertians in honor of the inventor of the "toy universe" on which the TVC Universe is based (Ch. 1), evolve from organism algorithms Maria wrote into the source code for their universe. They are remarkable for, among other things, "their open-air digestive tracts" (Ch. 26), in which food is inserted into a cavity under their wings and dissolved by enzymes; once nutrients are absorbed, the remnants drop freely to the ground. The description of this digestive and defecatory system is the very first detail Maria and Durham discuss when observing the Lambertians, emphasizing the degree to which the guts and their contents, even in radically altered form, define an entity as living.

The Lambertians' culture develops rapidly and ultimately spells doom for the TVC Universe once they come into possession of the rules that govern their simulated plane of existence. Lambertian philosophers and scientists insist that "the TVC rules are false – because the system those rules describe would endure forever" (Ch. 30). Something in the Lambertian rejection of infinity exerts a corruptive influence on the TVC source code, which unravels and brings Durham and Maria's experiment with digital immortality to a rapid end. Though it functions as a rebuke of endless life, Egan's dissolution of the TVC Universe flips Huxley's distrust of excremental immortality in *After Many a Summer Dies the Swan* on its head. Whereas the earlier novel resisted the possibility of life without end as an ethical concern, Egan contests it on material grounds. His gaze remains fixed on the inescapability of decay as a condition of existence, and through the Lambertians insists that there is no life that is not subject to its effects.

Quite in contrast to earlier bodily imaginaries that treated the sanitized, de-excrementalized body with optimism, Egan shows how the erasure of shit points not to life but to death instead.

Ross Farnell has done good work tracing Egan's insistence on excremental bodies throughout *Permutation City*. In "Attempting Immortality: AI, A-Life, and the Posthuman in Greg Egan's *Permutation City*," he traces an "association between the visceral and the real" that he dubs the "viscer(e)al" (75). Viscereality is predicated on the inherent finitude of physical life, the clearest example of which comes in the messiness of the excremental body. Farnell insists that "the basic premise that the organic and 'human' can be wholly represented *as* digital information algorithms is problematic" (76),²⁷ due to the fact that the latter is unbound by the type of physical restraints that find themselves in excrement and other forms of waste. Though I largely agree with Farnell's reading of *Permutation City* as a cautionary tale (85) and excrement's place within it, he misreads the solidity Egan attributes to the boundaries between bodies and states of life.

Nowhere is this more evident than in the cursory approach Farnell takes to the novel's opening and closing scenes. Following the Prologue, *Permutation City* opens on a broken sewage main, the stench of which "was so bad from half a kilometer away that [Maria] turned into a side street, determined to find a detour" as she bikes across town (Ch. 1). The novel ends as Maria's eyes "[begin] to water from the stench" once more as she finds that the same "sewer main in Pyrmont Bridge Road had burst again" (Epilogue). Farnell sums up these "bracketing references to the stench arising from a burst sewer" as "a reminder of the function that deem the

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²⁷ As I argue in the Introduction to this dissertation, Jonathan Miles's assertion that "[t]here's a hundred thousand terabytes of data in a single gram of human feces" in the pages of *Want Not* (167) speaks to Farnell's concern here about the inadequacies of rendering human information in meaningful digital terms. By seeing this as one of many stories being told about the contents of shit in contemporary literature, my aim has been to show how an excremental lens on bodily knowledge is always plural and slippery.

body to be 'alive' and hence mortal" (76), but in this he overlooks a second, boundary-blurring power that the smell of shit wields.

Egan begins and ends *Permutation City* with the power of excrement to reveal the boundaries between worlds and render them permeable. The detour Maria takes in response to the broken sewer main leads her to confuse street art with a portal to another world. As she pedals her bicycle, she is suddenly "confronted by a vista of lavish gardens, marble statues, fountains and olive groves...an impossibly well-kept secret in this decaying corner of the city" and only barely manages to stop "just in time" before crashing into the mural (Ch. 1). Though in this opening sequence the narration attributes Maria's mistake to the sky-blue color the wall is painted, Egan's return to the same sewer to end the book more clearly establishes the connection between the excremental odor and the fantasy of access to another world. Maria returns to "the illusion mural" to commemorate the deaths of her parents and Durham and is greeted by her friend Stephen Chew, who, admiring the mural, asks, "It's beautiful, isn't it? Don't you wish you could step right through?" (Epilogue). Maria, associating the possibility of stepping between worlds with the trauma she and her Copies have experienced in the preceding pages, holds her tongue, until, "[a]fter a moment, her eyes [begin] to water from the stench." Egan brackets Stephen's idle comment about stepping through the mural with references to the sewer main having "burst again" and "the stench" that results, which creates a strong association between the smell in the air and the possibility of travel between worlds that troubles Maria into silence. In so doing, Egan suggests a similarity between the nested universes that his narrative explores and the imbrication of scales invoked by the world within that is uncovered through excrement.

Farnell describes this moment as representative of the "metonymic association between the pungent necessity of excrement and corporeal reality" Egan cultivates throughout the novel

(76), which it certainly is, but so too is it much more. Egan turns to shit not only as an index of the rank materiality of life, but also as a privileged means to reflect on the ways that the maintenance of life at one ontological level can derive from actions taken on another. Moreover, crossing such boundaries through excremental contact activates new possibilities of longevity that rely not on the absence of shit but on its relentless presence. Egan's reputation as a writer of hard science fiction makes it difficult to imagine that this correspondence does not lead back to new understandings of the gut's role within bodily health, but my aim in this chapter is not to postulate about which gastroenterological texts may or may not have served as source material for this or that novel. Through these six stories, I am tracing the evolution of an excremental idea, and regardless of its source, in *Permutation City* shit sheds its association with death; in fact, for Egan death appears only when waste is removed from the equation. This brings us, at last, to the end of the long century of shit, finally in a position to reflect on the ethical imperative for excremental contact.

2008: "Changes in the Composition of the Human Fecal Microbiome After Bacteriotherapy for Recurrent *Clostridium difficile*-associated Diarrhea" (Khoruts)

One of the reasons I have been chosen the "long century of shit" nomenclature is to take advantage of the slipperiness that has long been associated with this concept of the various "long centuries," particularly the long nineteenth century. The conceit of this chapter is to explore the persuasive hundred-year timeframe that separates Metchnikoff from Khoruts, but close investigation at either end of this century shows how porous those temporal bookends tend to be. Case in point: the Khoruts essay cited here was published in 2010 but describes a clinical intervention taken in 2008. I have chosen to highlight the earlier date in recognition of the fact

that the very choice of the clinical method must imply a shift in thinking about excrement about a source of health that was reported, but not created, by the subsequent publication of the article in the *Journal of Clinical Gastroenterology*. ²⁸

At first glance, Khoruts's writeup of his 2008 success closely resembles Eiseman's study a half-century earlier. Both paint dour pictures of their middle-aged patients' health before treatment and glowing praise for the speed and effectiveness of their reaction following the stool donation. Khoruts's patient "complained of loose small bowel movements every 15 minutes accompanied by great urgency and rectal tenesmus [the sensation of incomplete defecation]," as a result of which she "wore diapers all the time, was confined to a wheelchair, and lost approximately 27 kg [59.5 lbs] since symptoms' onset" (356). Khoruts would later add that he spent an additional seven months trying to treat the patient with additional antibiotic regimens before agreeing to the fecal transplant, meaning she spent fifteen months defecating every fifteen minutes. This shitty situation was quickly rectified following FMT therapy. Khoruts reports that the patient "had her first solid bowel movement on the second day after the treatment" (356), which he describes elsewhere as a "remarkably rapid and complete recovery" (359).

Where Khoruts's essay differs meaningfully from Eiseman's, however, is in the extensive methodology and analysis he provides. Whereas Eiseman was content to describe his process as little more than a fortuitous hunch, Khoruts shares the means used to sequence the donor stool, deploying bacterial primers with Joycean names like "Bact-8F (5'-

AGAGTTTGATCCTGGCTCAG-3')" and "926r (5'-CCGTCAA TTCCTTTRAGTTT-3')" (355). Crucially, he also provides clinical data, collected through fecal and biopsy samples

61

²⁸ In the next chapter, the long century of shit seeps out in the other direction, as I explore a handful of texts that predate *The Prolongation of Life*, namely *The Story of Germ Life* by Herbert Conn (1897) and "Three Thousand Years Among the Microbes" by Mark Twain (1905).

following the transplant, connecting the patient's new health to the "composition of [her] gut microbiota," which became "highly similar to the donor" (356). There is clearly an element, within Khoruts's writing as well as in subsequent reactions to FMT within the medical community, to foreground an interest in methodology as the marker of science here in order to deflect from the stink of the medium. Khoruts's abstract acknowledges bacteriotherapy's intermittent history of use but emphasizes that "limitations of conventional microbiologic techniques have, until recently, precluded testing of this idea" (354). Similarly, in his introduction, he notes that "[u]nderstanding of the microbial composition of human intestinal track [sic] has, in the past, been elusive in large part owing to the limitations of standard microbiological techniques" (354, italics mine). I am insisting here, as I have throughout this chapter, on paying attention to the causes that fall outside the technical explanation Khoruts offers here, which I suspect is not quite as large as he presumes.

To explain Khoruts's success where Eiseman failed simply as a function of the technical apparatus available to each treats the advancement of science as a beast with no master, as though the ability to count and compare microbiotic populations were a fait accompli that, like Huxley's Fifth Earl, required "just time" to develop. I am neither the first nor the loudest person to cry foul on this,²⁹ though perhaps, given the subject matter, my emphatic "Bullshit!" will stand out nonetheless. Certainly, there are ways that scientific inquiry begets further inquiry, but the hundred years between Metchnikoff and Khoruts, or even the fifty since Eiseman, were no sterile laboratory environment, excluding every influence but for those cultured in the petri dish labeled Science.

21

²⁹ Neither is Bruno Latour, but his insistence on the political side of science in *Politics of Nature: How to Bring the Sciences into Democracy* (2004) is nonetheless a good example of this type of scholarship.

Ideas about the gut drive the pursuit of further knowledge of the gut, and, like gut microbes themselves, these epistemologies do not just grow in the lab. As Alexander Khoruts himself notes, the human microbiome is too complex to be consigned to the artificial, sterile environment of the laboratory:

These microorganisms live in a community that we cannot reproduce in a Petri dish.

They are social, just like humans...When researchers try to grow these bacteria using classical microbiological techniques, one organism at a time, they end up missing 99% of species. In fact, microbes that can be grown easily in the laboratory as single organisms are often pathogens. (LeBeau 75)

Khoruts's note that classical methods of culturing microorganisms privilege pathogenic species over symbiotic microbes illuminates the confirmation bias in which epistemology determines results. Here he insists on new methods that look to the gut flora in their natural habitat as an integral part of the human experience. This does not happen without the slow acculturation of views of waste and its inhabitants as amicable to the bodies that produce and house them.

And while Khoruts stops short of naming humanistic methods as a contributing factor to this development, his reliance on narrative and aesthetic measures as a component of his success with FMT is fairly plain. The example par excellence within the modern FMT movement is assuredly the prominence assigned to the source of the donor stool that cured Khoruts's patient so effectively. Unlike Eiseman, who played coy with the origin of his enemas, in his interview with LeBeau, Khoruts recalls making "a crude suspension of her husband's fecal material" (74). Carl Zimmer's writeup of the treatment for *The New York Times* shortly after the publication of Khoruts's essay in the *Journal of Clinical Gastroenterology* fixates on this detail as well; Zimmer mentions "her husband's bacteria," "her husband's stool," and "her husband's

microbes" in the space of 160 words ("How Microbes Defend and Define Us"). This still pales in comparison to Khoruts's narrative turn in the *Clinical Gastroenterology* essay itself, which, despite its overt trappings of clinical objectivity, indicates that the "fecal donor material was taken from her husband of 44 years" (356). The length of the patient's marriage to her husband is mostly irrelevant to the methodology of the treatment, 30 but by inserting it so artfully into his analysis of the results, Khoruts establishes a resonance between the experiences the two have shared over four decades and the gut flora they now share as well. Khoruts invokes the story of the macroscopic life his patients shared as relevant to the microscopic intervention he now performs. Moreover, given that husband and wife now share identical gut flora populations, the latter's a clone of the former's, we must consider how each now lives with, in, and for the other.

We ought to recognize this gesture as steeped in the traditions of narrative study. Especially in his interview with Steve LeBeau and in his subsequent writing on the FMT movement that exploded following his 2010 publication, Khoruts has routinely cited the pervasive public demand for access to these treatments. Perhaps the most surprising indication of the demand for greater access to shit is the vibrant do-it-yourself FMT community that has sprung up. Khoruts "get[s] emails all the time from people who want to take somebody's feces, put them in a blender and do an enema" (LeBeau 76).³¹ Nicola Davis's article in *The Guardian*

³⁰ I say here "mostly irrelevant" because what standards currently exist for FMT donor selection heavily privilege personal knowledge between stool donor and recipient, suggesting that, similar to Todd's reading of Isherwood, to know another is to know their shit. The Infectious Diseases Society of America (IDSA) notes a practical explanation for this, suggesting that the "donor most commonly 'known' to the recipient [in accordance with the FDA's draft guidance] is the spouse or significant/intimate partner which minimizes the likelihood of transmitting an occult pathogen with the stool sample." This is a rare moment, then, where the line that differentiates the interpersonal from the intrapersonal is rendered permeable. This haziness provides clear stakes for thinking about microbial matters on the human scale and provides a wealth of examples in which excremental exchanges reveal, even reinforce, human relationships. I take up this notion of excremental kinship in greater detail in Chapter 4.

³¹ This seems to be a fairly common experience among people who work with guts and their contents. Elizabeth Wilson, in the conclusion to her fascinating *Gut Feminism*, remarks that "[a] lot of people emailed [her] this article [about a study of the relationship between microbiome and affect in mice], knowing that [she] was working with data about the gut and mood." Similarly, I am the person that everyone I know sends whatever they read about poop. Might we not see a real call to action here, a pervasive need to filter excremental questions and content into a

tract leaves FMT indelibly marked by the whiff, if not the fact, of coprophagy.

By singling out the public interest in receiving this type of excremental contact by any means necessary, I mean to underscore the nearly unfathomable amount that ideologies of excrement must change in order for FMT to catch on in 2008 after circling the clinical drain for so long previously. This paradigm shift is an aesthetic issue on the face of it. Khoruts acknowledges the treatment's capacity to disgust. Working with shit helps him "appreciate[] the practical barriers to doing fecal transplantation in a busy clinical setting. The olfactory potency of human fecal material revealed at the touch of a button can be quite shocking" (LeBeau 74), which, and I say this as someone who engages in a fair amount of excremental euphemism

framework that explains their suspected significance, despite the taboo silence that relegates these conversations to email inboxes?

himself, is an admirably contorted way to remind us shit stinks. This stink, moreover, can be potentially problematic when it dissuades doctors, who "say 'yuck' more than the patients" (LeBeau 77), from providing access to a treatment that, per Khoruts, has a higher impact than a comparable blood donation for a health issue that "in the United States is far bigger in terms of mortality than AIDS" (74).³² He describes ways that his lab has solved aesthetic issues related to the packaging of the stool samples they ship to other FMT providers, mainly through material alterations so that the "material hardly smells [though it] has a brown color still because various chemical pigments have not been completely removed" (77). As this shows, the aesthetic work of rendering excrement palatable can have real, meaningful repercussions on human life, and it unfolds in ways far beyond packaging.

While the novels I have cited cannot remove the remaining brown pigment from the samples Khoruts ships across the country, they surely help to wrinkle the nose less at the very idea of contact with excrement as a thing to be celebrated rather than avoided. The aesthetic work of rendering excrement palatable goes beyond packaging. As Khoruts tells Steve LeBeau in the quote that serves as this chapter's epigraph, "This work is very much in progress, as the full diversity of human experience has not yet been captured" (75). At the end of the long century of shit, I see this as the clarion call to carry on, embracing diverse means of exploring the human experience in its full diversity. This work has long been and will continue to be done as a joint partnership between literary explorations of great possibilities and scientific measurement of gut populations. In narrative form, we explore ways of communing with others through fecal media. These tales reflect and construct largescale social responses to shit itself, such that the path to the

³² Khoruts: "In fact, our program is unmatched in its potential to save lives. One simple donation can help save several people from dying or having a miserable experience. No blood donation can do that. We have a lot of educational work to do" (LeBeau 75).

guts is blazed by literary and scientific voices in unison. The value this excremental perspective entails is not limited to FMT and its specialized, albeit promising, medical applications. Rather, this dissertation shows how the resurgence of fecal microbiota transplantation therapy is one manifestation of the ways by which the microbial vibrancy of excrement empowers new ways of thinking about the human as a conversation among its component parts, a symbiotic assemblage of agencies both impossibly alien and intimately familiar.

Chapter Two

"Onward and Inward!": Travels Through the Fecological Body

"Having viewed it from the outside, having traversed its main masses," George Chappell's narrator suggests of the human body in *Through the Alimentary Canal with Gun and* Camera: A Fascinating Trip to the Interior, "it is now high time that we should enter the vast and intriguing Interior. 'Onward and Inward!' Let that now be our slogan!" (22). From this slogan, I have taken the title of this chapter, and I adopt it now as my rallying cry too as I move from the excremental gaze of the first chapter, where I looked outward from shit to infinity, to an inward perspective. I turn now to the intestinal to see how scatology transforms internal boundaries over the course of the long century of shit. In this chapter, I look closely at four narratives across the 20th century that portray bodies as a surrounding landscape. Each of the primary texts I consider in this chapter – Mark Twain's fragmentary "Three Thousand Years Among the Microbes"33 (1905) George Chappell's Through the Alimentary Canal with Gun and Camera: A Fascinating Trip to the Interior³⁴ (1930), Nathanael West's The Dream Life of Balso Snell (1931), and Joe Orton's Head to Toe (1971) – takes place within the body. Twain's and Chappell's texts explore human bodies, whereas West and Orton venture into inhuman spaces, but I find commonalities in the ways they all represent the bodily interior as a habitable, communal space by applying ecological language to the task of anatomy and thereby resist the strict compartmentalization of the modern medical body. I dub the bodies these narratives describe from the inside "fecological" to reflect the dual reliance on the ecology of the human

³³ Abbreviated hereafter as "Microbes."

³⁴ Abbreviated hereafter as *Alimentary*.

microbiome and various scatological means of entering and remaining in the body these texts use to imagine the bodily interior as a space fit for human navigation and imagination.

I treat it as no coincidence that the birth of modern microbiology coincides with the golden age of the fecological narrative,³⁵ which aligns almost perfectly with the long century of shit. After all, the human body has been known to house invisible life since the 17th century. As early as 1681, Antony van Leeuwenhoek, "universally acknowledged as the father of microbiology" according to Nick Lane (1), observed the "animalcules" living on his teeth and in his feces under magnification. Van Leeuwenhoek described the Giardia duodenalis he discovered living in his own excrement so accurately that his illustrations of the protozoan are still recognizable today. Giardia is far from the only way van Leeuwenhoek continues to cast a long shadow. Many 20th and 21st century microbiologists have found themselves inseparably wrapped up in their Dutch forefather's enthusiasm and expertise. Clifford Dobell found it "impossible to read [van Leeuwenhoek's letters] without feelings of friendship for the man himself' (310-311). Ed Yong is similarly moved in *I Contain Multitudes*. He recounts his amazement when, viewing green pond bacteria under 200x magnification at the Micropia exhibit in 2014, he recalls that van Leeuwenhoek's handmade microscopes could magnify objects "up to 270 times" (28). The surprise Yong feels, juxtaposing the public spectacle of the Micropia event against the superior quality of handmade microscopes from three centuries earlier, is a powerful reminder that the apparatuses of microscopy have deep historical roots.

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³⁵ This is not to suggest that the texts considered here are the first instances of a fictional travel through a body. Rabelais penned *Gargantua and Pantagruel*, which includes a sequence where the giant Pantagruel lets his consort Alcofribas seek shelter from a storm by climbing into his mouth, three and a half centuries before Mark Twain took up similar ideas in "Microbes." This portion of *Gargantua and Pantagruel* displays many of the same characteristics of the fecological narrative I trace throughout this chapter, despite the fact that the text predates the modern microscope, but it has been excluded from my analysis due, in part, to the Rabelais' consistent focus on Pantagruel as a character in this narrative. His voice remains present throughout Alcofribas's exploration of his insides, with the result that his text imagines a bodily interior over which a singular, recognizably human voice still reigns.

The same cannot be said for the methodology of microbiology. The microbiologist Herbert W. Conn, whose text The Story of Germ Life acts as a key interlocutor in this section of the chapter, noted in 1897 that "a student of to-day who wishes to look up the previous discoveries in almost any life of bacteriology need hardly go back of 1880, since he can almost rest assured that anything done earlier than that was more likely to be erroneous than correct" (16). Conn's attention falls not to the passion or craft of the scholars who preceded him but to their analyses, and determines them to have erred. Conn does not focus unduly on the precision of the equipment in his critique. He credits van Leeuwenhoek for, "working with his simple lenses, [having] first [seen] the organisms which we now know under this name [bacteria], with sufficient clearness to describe them" (10). Instead, Conn reserves his sharpest barbs for his predecessors' dearth of inquiry and "the looseness of the ideas which pervaded all scientists" (12). He criticizes the work that preceded his own for having "[given] us no knowledge of bacteria beyond the mere fact of the existence of some extremely minute organisms in different decaying materials" (12). As the 20th century dawned, the praxis of microscopy at last outstripped its techne.

The rise of germ-based theories of medicine rewrote the body as a function of anatomy under constant assault. Under such circumstances, the world within the human body takes on a vast new importance as a site for narrative contemplation of the experiences of life and culture. As I will suggest in what follows, these conditions are essential fodder for the fecological body, which is rigorously contextualized as a response to the overly medicalized demands on the human interior space. That is, when the fecological body appears, it is in explicit response to contexts in which individual embodiment is subsumed into discourses of sociality and public through the rise of germ theory and nascent understandings of microbes as a source of health as

well as disease. The fecological body, as I articulate it, attempts to mediate medico-anatomical claims to the body as a component piece of the biopolitical landscape by showing how it, the body, is itself a landscape, containing and constituted by the various microbial agents that inhabit it.

In what follows, I consider the ramifications of these texts that imagine the human as simultaneously character and setting for a drama that unfolds across several scales. In some ways, this chapter is interested in periodizing certain narratives of the body as vibrant and filthy, in a way that should echo the historicizing work I undertook in the previous chapter. At the same time, I here engage with several theories of embodiment and human geography in order to show how the type of scatological thinking I deploy throughout this dissertation empowers a new approach to the body as space that further blurs the line between ecology and anatomy in ways that have been suggested but not realized in preceding works on open, hybrid bodies. Thus, this brief introductory section is followed by a survey of some key interlocutors for the way I am thinking about the body in ecological terms here. I then interweave readings of "Microbes" and Alimentary in order to articulate three key characteristics of the fecological body: the contextualization of events within the body in terms of prevailing sociohistorical factors, an interplay of ecological and anatomical language to define a setting, and a dominating interest in material and temporal ambiguity within the body that can be attributed to the inherent multiplicity that this tension establishes. Following a turn to West's and Orton's texts to show some of the ends to which these fecological characteristics can be put, this chapter ends by detailing the powerful undercurrent of excremental language and logic that drives such narratives forward, alongside a relatively brief conclusion that lays bare some additional stakes for this type of scatological analysis.

There is nowhere to go now but in, so, with the words of George's Chappell's adventurous narrator at the start of his fascinating trip firmly in mind, let it be resolved: Onward, and inward!

Thirdspace, Turdspace, and the Bodyscape

Linda Nash's Inescapable Ecologies: A History of Environment, Disease, and Knowledge opens with a meditation on the irrigation canals that crisscross California's Central Valley. In such a place, Nash writes, "amid a landscape of engineered rivers, laser-leveled fields, and twothousand-acre cotton ranches planted with genetically modified seed, the power of capitalism to shape the landscape, and the resulting sense of alienation, can seem at once undeniable and overwhelming" (2). Given Nash's interest in the earlier American model of bodily health as a function of balance between the individual and the space she inhabits, the canal is a fitting site from which to launch her critique. Canals remake the landscape, bending nature to the human will. Canals relate to the lands they terraform in much the same way that Nash's modern body – "the body that is composed of discrete parts and bounded by its skin; in other words, the idea of the body that most of us take as so self-evident that it requires no comment" (11-12) – relates to embodiment and health. Just as canals rewrite the landscape to fit the map of human progress, the modern medical body, per Nash, rewrites the individual as a discrete, sovereign body, wholly separate from the surrounding climate and conditions. Nash's task in *Inescapable Ecologies* is to seek out "cracks in the metaphorical irrigation canal" in order to reinscribe ecology as a mode of thinking about healthy bodies and the relations between them (2). When Nash juxtaposes the 19th century American settlers thought about their bodies, "characterized by a constant exchange between inside and outside, by fluxes and flows, and by its close dependence on the surrounding

environment" (12), against the irrigation canals of modern-day California, she does so in order to mourn the death of the ecological body and argue for a return to thinking of the body as wrapped up with the landscapes it occupies.

I am not so sure that the ecological body ever died; rather, through the growing understanding of the human microbiome, it simply moved inward. Thus, in this chapter I introduce a very different type of canal as my supplement to Nash. Whereas she frames her ecological body through the irrigation canals of central California, I turn instead to the alimentary canal to help theorize the narratives and conceptions of the body that are set along its banks. I want to emphasize how the excremental interior preserves a sense of the body's permeability to nonhuman materials and forces even within the anatomical shift by which, in Nash's formulation, the modern body supplanted the ecological.

Linda Nash is, of course, far from the first scholar to critique the medical transformation of bodies from infinitely open to the discretely singular. Warwick Anderson's work on colonial hygiene and the pathologization of Filipino bodies under American imperialism shows the good work yet to be done by remaining attentive to the political weight this equation of spatiality and embodiment is made to carry. Anderson's study of the Philippines under American occupation is historically contemporaneous with much of Nash's work with California at the turn of the century, though Anderson notes that the body open to its surroundings was eradicated much more quickly and consciously in the Philippines than in the Central Valley. Whereas Nash devotes several pages to the intermixing of germ theory and locational diagnoses in rural California, Anderson describes decisive action by medical imperialists to pathologize Filipino hygienic and defecatory practices as dangerously open. "Excremental Colonialism" is most notable for the line it draws from externally imposed lavatory practices and the imposition of

colonial control over Filipino bodies. Like Nash, Anderson details the violence done and sovereign authority maintained by severing the body's openness to the outside, though the time scale for his analysis is far more condensed than Nash's, which unfolds on the scale of several decades, or Foucault's, which covers centuries.

Michel Foucault, of course, also focuses on the historical transformation of bodies through their varying conceptualizations, though the scope of his work spans across centuries. Though Nash, somewhat amazingly, avoids citing him, the transformation of ecological bodies to modern ones aligns historically and conceptually with Foucault's work on bio-power and the birth of the clinic. In the first volume of *The History of Sexuality*, he defines bio-power as that which has "brought life and its mechanisms into the realm of explicit calculations and made knowledge-power an agent of transformation of human life" (143). Nash's *Inescapable Ecologies* emphasizes that explicit calculability is a function of the modern body alone. The ecological body she celebrates is characterized by its inaccessibility as a discrete object of knowledge outside of its interaction with the environmental factors with which it enters into balance.

In *The Birth of the Clinic: An Archaeology of Medical Perception*, Foucault describes how the new medical gaze reconstructs bodies as solid, singular bearers of truth and identity. As he writes it, the medical boom at the turn of the century

consists in leaving to experience its greatest corporal opacity; the solidity, the obscurity, the density of things closed in upon themselves, have powers of truth that they owe not to light, but to the slowness of the gaze that passes over them, around them, and gradually into them, bringing them nothing more than its own light. The residence of truth in the

dark centre of things is linked, paradoxically, to this sovereign power of the empirical gaze that turns their darkness into light. (xiii-xiv)

Elsewhere, Foucault traces the birth of this clinical body, closed in upon itself by the meticulous gaze of the physician, to the creation of the hospital system, which, being made up of "discontinuous, exclusively medical spaces" (42), served to remove ill bodies from their surroundings. This is the critical moment in both Foucault's and Nash's projects: the replacement of the interactional, quasi-social understanding of health with the narrative of the enclosed body in a medical vacuum. In both cases, the effort to articulate both concepts of the body is intended to push back at the discourse of power emerging from the sovereignty of closed, medicalized subjects.

Ostensibly, Nash's work stands out from these others in the ecological inflection of her argument. Her suggestion that "placing the human body at the center of an environmental history...challenges the modern dichotomy that separates human beings from the rest of nature" recalls Timothy Morton's similar thesis in *Ecology Without Nature* (8). Likewise, Stacy Alaimo focuses on reopening the body to the outside in order to know it better in *Bodily Natures:*Science, Environment, and the Material Self. Her notion of trans-corporeality promises a view of the material world as "never merely an external place but always the very substance of our selves and others" (158). To the extent that the ecological body participates in this discourse of permeability, it offers a meaningful way of contemplating embodied life as the dynamic interaction among a range of forces and actants.

Nash casts the body in ecological terms by showing how earlier models of health reflected environmental influences on the body's homeostasis. Of particular interest to her is the etiology of miasma, the 19th-century catch-all term for afflictions that were diagnosed as a

function of the local climate or terrain. People would flock to or flee from sites that were known to be salubrious or sickly, respectively. From such practices, Nash draws her concept of the ecological body, which is defined by its openness to environmental influences. She contrasts this permeable ecological body with the medicalized modern body, the treatment of which enshrines the absence of disease as the fundamental sign of health. Whereas health was formerly seen as a balance between complementary internal and external factors, modern medicine reimagined the body as though it operates in a vacuum, wholly separate from and unaffected by its surroundings. Nash's argument throughout *Inescapable Ecologies* is that this type of thinking mythologizes the human as being separate from nature. The ecological body, she suggests, better reflects the web of agency between human and non-human actants that determines how bodies operate on the individual and global scales. The stakes of *Inescapable Ecologies*, then, are twofold and vaguely threatening. Mistreating the environment on the presumption that it is separate from the human sphere risks devastating ecological consequences. These in turn will presumably exacerbate the deleterious effects that damaged landscapes may have on the permeable bodies inhabiting them.

One of the cracks she imagines in her metaphorical irrigation canal is "that there are instances in which understandings of the landscape fall outside the rubrics of conquest and alienation that dominate so much of American environmental history" (2). She finds the body to be "like the natural environment...unpredictable and resistant to quantification" (147), and, to be clear, *I want to agree with her*. Nash, however, suggests that the way to make the body less predictable and more resistant is to show how the ecosystems that surround it operate like a body; I am here taking the inverse approach by insisting on ways that the body acts like a space as well. I find it particularly useful, then, to turn to Foucault's concept of the heterotopia, the heterogeneous spaces of culture that are similarly tied to the body.

In "Of Other Spaces: Utopias and Heterotopias," Foucault reflects on the fundamental role that space exerts on "the anxiety of our era" (2). His attention falls to specific sites with "the curious property of being in relation with all the other sites" (3). These he dubs "heterotopia," arguing that they function as "something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted" (3). The six principles Foucault outlines for heterotopic space align fairly well with the promise of the fecological body as I detail it. Foucault suggests that such spaces must be universal to all cultures; they are subject to change over time in synchrony with the culture that constructs them; they are capable of collapsing incompatible sites into a single shared location; they are entwined with specific slices in time, or heterochronies; they presuppose laws of permeability that simultaneously open and isolate them; lastly, heterotopias perform a function that affects all other spaces. Fecological bodies and the narratives that explore them give these heterotopic and heterochronic principles a way permeate our lived experience. Heterotopia denotes a situated experience that is simultaneously real and familiar while also imagined and alien. My work in this chapter brings this aporia closer – really, closest – to home, showing this spatial experience of alterity to be a fundamental component of the world we inhabit, and our place within it. This must be seen as an epistemological intervention as well as ontological. The benefits of the open body do not solely accrue as a fact of nature, but instead rely on a conscious adjustment to the way we think about the experience of embodiment in order to highlight the multitudinous plurality we – and this is the plural human/microbial "we" – bring with us.

The heterotopic has been seized as a critical lens for thinking alterity within the larger domain of spatial studies. In his excellent *Thirdspace: Journeys to Los Angeles and Other Real-*

and-Imagined Places, Edward Soja invites us to "think differently about the meanings and significance of space and those related concepts that compose and comprise the inherent spatiality of human life: place, location, locality, landscape, environment, home, city, region, territory, and geography" (1). As the title suggests, his concept of thirdspace borrows from Homi Bhabha to consider physical locations that are simultaneously real and imaginary; thirdspace is, as he puts it, "an-Other way of understanding and acting to change the spatiality of human life" (10). Soja's thirdspace is attentive to the ways that inhabiting, dwelling in space constructs human life, but this is surely just one part of the equation of this spatiality. As such theories of the body within its environment proliferate, there is more to be done with their implied corollary: the environment within the body. Thinking the body in ecological terms cannot solely mean to situate it within the world that surrounds it. To this we must add the degree to which the body surrounds a world of its own – a traversable bodyscape, inhabited by a multitude of foreign life both hostile and hospitable to the human.

Fecological bodies are the thirdspaces we take with us. I might even suggest that we see these narratives as being set in turdspace: the world we are, which is, per Soja's projections for all such spaces, radically open and strategically flexible as a response to oppression and inequalities and, per mine, fundamentally inextricable from a hybrid understanding of bodily populations that is best explored scatologically. The turdspace of the fecological body gives us a way to rethink embodiment as the creation of a counter-site, an outside place that is yet inside, a Foucauldian heterotopia that is the product of human and bacterial cultures intermixed. By exploring such sites, simultaneously real and imagined, fecological narratives give us a way to rethink embodiment as involving an outside place inside the body.

Nash and others take this form of ecological humanity for granted in formulating the ecological body. "[C]ontemporary medicine," Nash writes, "is not much concerned with the landscape; physicians generally confine themselves to the terrain of the human body" (44). To see the body as a terrain in the first place requires a metaphor of ecological spatiality that this chapter addresses directly. Foucault, similarly, uses heterotopia to theorize spaces of alterity, but does not explain that the term is not his own. As Peter Johnson notes, heterotopia is "originally a medical term referring to a particular tissue that develops at a place other than is usual" (77). That Foucault can only theorize his counter-sites by adopting a concept from the exploration of the bodily interior is of profound interest to me in this chapter, and means that, by bringing the heterotopic back into the body, I am simply completing the circle that Foucault started when he let the heterotopic out in the first place.

By dubbing these bodies fecological, I am attempting to bring Linda Nash's ecological body into contact with Mikhail Bakhtin and the carnivalesque through Michael Mayerfeld Bell's concept of deep fecology. In his essay "Deep Fecology: Mikhail Bakhtin and the Call of Nature," Bell argues for a clearer separation of Western ecological embodiment from the bourgeois ego and suggests that returning to the grotesque may be the best method to do so. Bell notes that Bakhtin's concept of the dialogic "is extremely ecological" and "speaks of mutuality, interchange, interaction, of a dynamic holism" (68). The litany of contemporary ecocritical ways to express mutuality and networks of agency speaks to the utility Bakhtin's dialogic has within these circles. In much the same way that Nash contrasts ecological body of the 19th

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³⁶ Indeed, Bell's depiction of ecology as the study of dynamic holism and non-hierarchical interaction anticipates Karen Barad's concept of "intra-action," as articulated in her *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Barad's text, which continues to be widely cited in material ecocritical arguments, is in many ways a physicist's take on *Rabelais and His World*, as Barad deploys the methodologies of the hard sciences to echo Bakhtin's calls for attention to lowly matters that overturn top-down ontologies of agency.

³⁷ In *The Dialogic Imagination*, Bakhtin formulates heteroglossia as a linguistic object of study, but the model it provides for tracking polyagential relationships is invaluable.

century to the concept of the body that replaced it, much of Bell's celebration of Bakhtin revolves around a "great contrast to the predominant bodily images of our day" (73). What Nash calls the modern body, Bell calls the classic body, the significant feature of which is "that it is an individual body" (74), and in his appeal to Bakhtin he intends to move away from these individual bodies, back to the open joy of embodiment. My formulation of the fecological body takes up in Nash's and Bell's shared interest in correcting the excesses of the modern or classical body by returning to something earlier and suggests instead that we can look into bodily narratives in order to see something *new* instead.

In other words, I am bringing these various conceptions of the spatiality of human life together in order to show how accounting for the body ecologically means more than merely finding its balance *with* the surrounding landscape. I focus on changing the minimum unit of bodily analysis, turning now to texts that establish each body as always-already emerging from the cooperation and conflicts between its microscopic inhabitants. I argue that, by devoting attention to the ways that the novels under consideration depict bodies as heterogeneous spaces, we can better address how Foucault's work with social space aligns with his work on the political inscription of bodies.

"An epoch-making achievement": Contextualizing the Fecological Body

I want to start articulating the fecological body by focusing, in this section and the one that follows it, on the two earliest literary texts under consideration in this chapter. By dint of their earlier composition and publication, Twain's "Microbes" and Chappell's *Alimentary* are more explicit in their engagement of the newness and novelty of thinking of the body as a space to dwell within, though the form that inhabitation takes is profoundly different in each text. In

the extant portions of Twain's "Microbes," a formerly human scientist Huck narrates his life after being transformed into a cholera germ and injected into the body of a destitute tramp named Blitzowski by an analog for Mary Baker Eddy, the founder of Christian Science. George Chappell's novella is framed as a fishing expedition led and narrated by an experienced guide on his most recent trip through the Alimentary Canal. Much of the plot focuses on the group's various close calls as they wind their way from the Oral Cavern down to the resort city of Colonsur-Mer, the terminus of the Alimentary Canal. Nevertheless, both texts marvel at their bodily setting in a way that reflects the foundation of these texts in the explosion of microbial knowledge that precipitated the long century of shit.

These changes were not, of course, immediate, but rather the result of a buildup of bodily knowledge that reached its tipping point around the first decade of the 20th century. The microbial scale clearly piqued Mark Twain's interest as the 19th century drew to a close. As early as 1883, Twain privately expressed the idea that "we are only the microscopic trichina concealed in the blood of some vast creature's veins, and it is that vast creature whom God concerns himself about and not us" (quoted in Mandia, 198). "The Great Dark," drafted but never finished during the 1890s,³⁹ marks Twain's initial turn to the microscopic in narrative form, depicting the voyage of Mr. Edwards and his children through a single drop of water infested with single-cell sea monsters. This early miniaturization narrative takes place not within a body, however, but

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³⁸ Mary Baker Eddy is only named in an early draft of the manuscript. In a passage that was later excised, she "applied her supernatural powers to the turning of [Huck] into a cholera germ" out of annoyance for "a certain doubtful statement" he had made (434 n. 6). Twain ultimately revised this precipitating event to simply a "magician's experiment miscarried" (434), though his critique of the Sooflaskies' "Giddyite" sect remains both intact and easily recognizable as a thinly veiled parody of Christian Science. John Tuckey also describes an incomplete sketch from Twain's notes in which Huck "cynically adopt[s] a religion [called Kitchen Science] that will not, he believes, require of him any charities or sacrifices" (431). Twain's "Christian Science" essays are instructive here, as is Cynthia Schrager's "Mark Twain and Mary Baker Eddy: Gendering the Transpersonal Subject."

³⁹ John Tuckey's prefatory notes for the story suggest an intermittent drafting period at least inclusive of the period from 1895 to 1898.

inside a slide beneath the lens of a microscope. As such the fragment depicts its human cast as beset upon by autonomous, external, and infinitesimal threats. Moreover, as the voyage is ultimately revealed to be the product of a dream, Twain deflects his first foray into the realm of speculation, the horrors implied by but not coterminous with reality.

Elements of Twain's earlier microbial cynicism are certainly evident throughout the text of "Microbes"; Huck all but quotes Twain's journal when he considers "the possibility, and substantially the certainty, that man is himself a microbe, and his globe a blood-corpuscule drifting with its shining brethren of the Milky Way down a vein of the Master and Maker of all things, Whose body, mayhap... is what men name the Universe" (454). Yet unlike in his earlier microscopic meditations, here Twain entertains the idea that the infinitesimally small may not mean infinitely meaningless. He warns, through Huck, that it "isn't safe to sit in judgment upon another person's illusion when you are not on the inside. While you are thinking it is a dream, he may be knowing it is a planet" (492). There is, in short, plenty to suggest that gut flora and the discovery of the intestinal multitudes are the precipitating factors for the shift in Twain's thinking.

Despite their great quantity, the bodily nations of Blitzowski are not equal. The republic of Getrichquick is "universally known as the greatest of all democracies" (442), due to the fact that its flag flies over "the whole of Blitzowski's stomach" (442). Control of the alimentary canal grants the republic substantial economic power and positions Getrichquick as a clear stand-in for fin de siècle America. But as Huck notes, this has not always been the case. He notes a key shift in Getrichquick's international policy in the distant past when, after ages of being "selfish," the denizens of the stomach feel "ashamed" (443). The citizens of Getrichquick took to the polls and

replaced their nation's policy of isolationism with "a higher and holier one" (443), claiming a chain of islands in the body's Great Lone Sea in the name of the republic.

Huck acknowledges this conquest as "an epoch-making achievement" (443), and Twain historicizes this new epoch with great precision. Huck notes that guttural expansion began "in very recent times – hardly three hundred and fifty thousand years ago, indeed" (443). Following his earlier calculations of roughly one human week per microbe millennium would place this revolution of the gut between six and seven years in the past. Counting back six and a half years from May 1905 means that the birth of intestinal imperialism aligns almost perfectly with December 21, 1898. On that day, William McKinley's Benevolent Assimilation Proclamation declared "the future control, disposition, and government of the Philippine Islands" to be the purview of the United States (McKinley). With Twain's use of the president's own terminology within the text, noting that the gut's expansionist doctrine has been "baptised with the noble name of Benevolent Assimilation" (443), the allegory of imperialism is certainly undeniable here.

In fact, "Microbes" has largely been read in this light. In "Contracting Empire," Rachael Nichols turns to "Microbes" as a tale of immunological imperialism. She reads it alongside "A Salutation Speech from the Nineteenth Century to the Twentieth," published more than four years before Twain started "Microbes," to track his evolving concept of embodied citizenship. Nichols treats Twain's play with microbiology as a function of his critique of empire; she is not alone in such a reading. Scott Michaelsen points to "Microbes" as one example, among many, of Twain's works on imperialism in "'The State, it is I': Mark Twain, Imperialism, and the New Americanists." Jim Zwick similarly fits "Microbes" in alongside the more overtly anti-imperial "King Leopold's Soliloquy" and "The Czar's Soliloquy," which were both also written in 1905.

To read "Microbes" solely as a critique of empire presumes that the epoch achieved by annexing the bowels is defined primarily by imperialism. I define this epoch differently.

In 1897, just over seven human years and "hardly three hundred and fifty thousand years ago" before Twain started "Three Thousand Years Among the Microbes" in microbe time, Professor Herbert Conn published *The Story of Germ Life*. It is a noteworthy text for a number of reasons, not least of which being Twain's clear familiarity with it. Henry J. Lindborg established Conn's text as a key interlocutor for "Microbes," though clumsily, in his "A Cosmic Tramp" essay. Lindborg points to "R.D. Conn's *Life of the Germ*" (654) as Twain's source for the microbiological information he plays with later in the novel, inexplicably misidentifying both the author and proper title of *The Story of Germ Life*. He exacerbates his error in the footnote for this citation, in which the author switches from R.D. Conn to "W.H. Conn" and the title remains *The Life of the Germ*. Lindborg's mistake trickles down into the first volume of Alan Gribben's *Mark Twain's Library: A Reconstruction*, which cites "A Cosmic Tramp" in order to place what appears to be the fictitious *The Life of the Germ* on Twain's bookshelf. 40

It's a surprising oversight, given that Twain refers to Conn by name in the pages of "Microbes."⁴¹ Huck reports having studied "micrology under Prof. H.W. Conn" (523), and as a result knows that

the human race was saved from destruction in the beginning by the microbe; that the microbe had been saving it from destruction ever since; that the microbe was the protector and preserver and ablest propagator of many of the mightiest industries in the

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⁴⁰ The second volume of Gribben's updated *Mark Twain's Literary Resources: A Reconstruction of His Library and Reading* will be published in 2019. In personal correspondence with Dr. Gribben, he reports "hav[ing] made good progress in figuring out this very problem" and promises "several more accurate citations" in the new edition.
⁴¹ Reviews of the "Mark Twain and Herbert Conn" exhibit at the University of Connecticut's Homer Babbidge Library in the fall of 2010 have been helpful in bringing this connection to light. I am particularly indebted to Dr. Kenneth Noll in the Microbiology department at UConn. In addition to curating the Twain/Conn exhibit with his students, he confirmed via email that "Lindborg was mistaken, there was no R.D. Conn."

Earth; that he was the personage most heavily interested in the corporations which exploited them, and that his expert service was the most valuable asset such corporations possessed; we knew that he kept the Earth's soil from being covered up and buried out of sight and made unusable; in a word, we knew that the most valuable citizen of the Earth was the microbe, and that the human race could no more do without him than it could do without the sun and the air. (523)

Huck's litany of microbial achievements summarizes Conn's text, which celebrates microbes' effect on human life and society, fairly faithfully. In addition to two chapters that debunk the idea that *all* disease is bacterial in origin, Conn details bacteria's essential role in a number of traditional industries, including dairy, fermentation, linen production, and tobacco curing. Twain's quote from above is particularly invested in Conn's "Bacteria in Natural Processes" chapter, which lauds microbes for their indispensability in maintaining the food cycle, particularly due to their ability to convert abject materials like excreta into materials more readily digestible by plants and animals. Though Twain certainly satirizes Conn's breathless enthusiasm, it is also clear that Conn's measurement of microbes' effect in human society informs Twain's depiction of them as living in such a society.

Twain's specific invocation of Conn within the text of "Microbes" necessitates a revision to the second general trend of scholarship on the text, which reads Twain's text as a general satire on contemporary science. Lindborg's "Cosmic Tramp" essay fits into this grouping, as does Beverly Hume's aptly named "Twain's Satire on Scientists." Hume, in fact, offers a reading of Twain's microbial narrator Huck as a semi-satirical reference to Thomas Huxley, the British biologist best known for his advocacy of Darwinian theory. Hume draws on Hyatt Waggoner's work tracing similarities between Huxley's science and Twain's science-inspired writings and

makes hay of the origin of the microbe's nickname "Huck": the other microbes, struggling to pronounce the name he invented for himself "out of a Zulu name and a Tierra del Fuegan name combined...asked [him] to give them an easier one, and [he] gave them 'Huck,' an abbreviation of [his] American middle name, Huxley" (Twain, 471). Hume seizes this as the grounds for her extended reading of T.H. Huxley into "Microbes," which ignores Twain's clearer debt to *The Story of Germ Life*. More importantly, it overlooks the extent to which "Microbes" acts as a direct response to the microbiotic foundation Conn finds underlying the macroscopic scale.

Conn is not the only purveyor of this new ontology, however. George Chappell's Alimentary follows "Microbes" in spirit as well as chronologically, though it is, in one crucial way, a text willfully out of time. Chappell draws his title and topic from a mock travelogue delivered by the humorist Robert Benchley in 1910. Though specific details of Benchley's performance are tragically sparse, Benchley, with tongue firmly in cheek, described the topic of his own lecture as a "lark" resulting from a decision to "rush off one Easter vacation and poke about in the Alimentary Canal Zone" (v). Nathaniel Benchley's biography of his father adds that the mock travelogue through the human body, which apparently "reduced the staid Harvard Club to a quivering shambles" (40), used a blank screen and pointer as props. Nathaniel Benchley also cites a letter from Oscar Haussermann, a Harvard classmate and friend of Benchley's, at length. Haussermann describes Benchley's delivery of lectures, including the "Alimentary" address, as that of a gentle but quietly pleased with himself expert explorer not unwilling to talk about himself and his achievements and assuming as a matter of course that his prosaic stay-at-home listeners were interested in every detail of planning and of actual operation

(quoted in Benchley, 40)

that led to the ultimate and exciting success of the dangerous and intricate expedition.

The composite picture that emerges from these limited descriptions shows Benchley, a college junior, entertaining a well-fed group of Harvard alumni with an explorer's stories of a journey through the wilds of the human body, all while punctuating his points by jabbing at a blank handkerchief operating as a make-belief map of the intestinal tract.

Chappell's novella, published some twenty years after Benchley debuted the routine, explicitly cites the comic lecture as its progenitor and inspiration. He admits to having been in Benchley's audience in 1910, noting that he "heard the lecture by Dr. Robert B. Benchley from which, with his gracious permission, [Chappell took] the title for this book" (vi). Benchley, for his part, ceded the narrative to Chappell, noting in his Introduction to Chappell's text that his 1910 version of the trip to the interior was "a mere suggestion of what Dr. Chappell has so thoroughly and happily gone through with" ("Introduction," v).

Benchley is right to emphasize the thoroughness of Chappell's trip through the body. Throughout *Alimentary*, Chappell's explorers encounter a number of threats within the body, from currents and predatory nerve impulses to jilted lovers and anarchist gut flora. The greatest and most consistent threat, however, comes from the phagocytes swarming the waters of the Alimentary Canal and the Red River of the bloodstream. Based on Chappell's depiction of these shark-like immunological cells as "a remorseless killer with three sets of staggered teeth" (33), the group is right to fear them. Yet in addition to enabling Chappell's twist on hunting and fishing adventure stories, about which more will be said in the section that follows, the named invocation of phagocytes marks *Alimentary* as emerging from a specific historical understanding of the body and its functions.

Phagocytes were one of the earliest and most important discoveries in immunology. Èlie Metchnikoff won the 1908 Nobel Prize in Medicine, along with his collaborator Paul Ehrlich, for

their advancements to the understanding of human immunity. In his laureate address, Metchnikoff recalls their surprise upon surmising that the entities responsible for the body's immunological responses "had once been part of the digestive system" and, again, these organisms, "gifted with autonomic movements and capable of enveloping foreign bodies are no more than remains from the digestive system of primitive beings." Metchnikoff goes on to suggest that, "[w]henever the organism enjoys immunity, the introduction of infectious microbes is followed by the accumulation of mobile cells, of white corpuscules of the blood in particular which absorb the microbes and destroy them." They dubbed these corpuscules phagocytes, meaning "devouring cells," and described their immunological activity in terms of ingesting and digesting bacteriological threats. Within the body, then, phagocytes devour the foreign matter they encounter and neutralize the threat they pose through digestion. Within the text, phagocytes ground Alimentary as a response to the then-new understanding of bodily immunity as a function of the digestive rapacity of the entities that inhabit it. The body Chappell's narrator explores is "teeming with phagocytes" (61), suggesting the extent to which their presence in the body is perceived as an excess, overfilling the body's interior spaces with the discourse of germ theory. The détente the guide strikes up in regard to the phagocytes, appreciating their protective effect while also thwarting their natural inclination to eradicate him as well, signals the delicate balance the fecological body must adopt towards the cultural discourses of embodiment to which it responds.

This embodiment of a specific, clearly historicized context seems to be constitutive of the fecological body narrative writ large. The fecological setting of these texts serves to embody the temporal conditions and depict the route through the body as, in some cases, a mode of resistance to and, in others, a path to understanding of the nascent idea of human singularity as a fiction

displaced by the multitudinous symbiosis of the gut. In its place, Twain and Chappell's texts, as well as the later examples West and Orton provide, struggle with the implications of a new epoch in which the human may be displaced from within the human. The narratives that emerge from this central uncertainty thus display a profound uncertainty about the proper place for the human characters once they enter the human setting. As a result, the counter-narratives of the fecological body are profoundly marked by the hybridity and uncertainty these texts establish as the domain of the interior.

In Human Spaces: The Ecology of the Alimentary Canal

It is no accident that the literary texts I am using to theorize the fecological body are comedies. Much of the humor comes from the texts' description of bodily features as a literary setting, pointing out the conceptual elision that occurs when bodies are territorialized, made into terrain, uncritically. Thus George Chappell's explorers can begin their journey by rappelling around the Adam's Apple. Twain's Huck participates in an archaeological dig to excavate a fossilized flea from the dry riverbed of a vein. These are fairly mundane events that only merit attention through the juxtaposition of bodily and environmental familiarities. The work of humor is done here by the very idea that the body has been cast in such spatial terms. While Linda Nash takes the conceptual distance between anatomy and ecology for granted when she refers offhandedly to physicians' interest in the terrain of the body, fecological body narratives do not make the same mistake. Instead, they trade on this topological shorthand for the body while drawing comedy from the limited and necessarily alien way it conceives of embodiment. The central joke of these narratives is *that* they are set within the body, which artfully challenges clinical discourses that absorb ecological imagery unreflectively.

Nowhere is this more evident than in the play with the alimentary canal that drives several of these texts, from which I drew my earlier counterpoint to Nash's irrigation canals. The *Oxford English Dictionary* attests the usage of the phrase "alimentary canal" to refer to the digestive tract as far back as 1730. Curiously, the *OED* lists "alimentary canal" as the oldest of several similar phrases that pair the adjective "alimentary" with a noun to refer to the gastrointestinal tract. "Alimentary system" is the junior of "alimentary canal" by sixteen years, though that is still more than forty years before "alimentary tract" first appears. This is perhaps in contrast to what we might expect, given that "canal" reflects a more specialized, conceptual view of the body than either of the more generic terms that followed it. From this, it would seem that English has blurred the line between anatomy and ecology well before the advent of germ theory, though it was only after the latter's emergence that this bodily landscape would emerge as inhabitable and thus narratable.

Setting a tale on the shores of the alimentary canal is a savvy way to capitalize on its double valence as embodied and ecological description. Given that he invokes it in the title of his novella, perhaps it is no surprise that George Chappell depicts the alimentary canal at the heart of the bodyscape in which his story takes place. His guide first finds passage to the head so that his trip may begin at the Oral Cavern, "that fascinating receiving depot at the extreme northern end of the 'Old Alimentary'" (23). The community Chappell finds in the body is specific to the intestinal tract, given that "civilization cling[s] to the Canal" (39), in the guide's words. This does not mean, however, that Chappell reduces the Interior to a homogeneous excremental plane. Rather, he takes care to show that the shitty places of the body are better disposed to inhabitation and migration, whereas the body's other systems remain inhospitable to community. "The Canal," he notes, "while an important factor of the system, is still only a part. It gets its impulse

from the great Red River, a rushing torrent so swift that it is *unnavigable save for its natural inhabitants*" (39; emphasis added). Chappell contrasts the Red River of the body's circulatory system, wild and inhospitable, with the alimentary canal as a constructed and controlled site of civility. By differentiating between the body's natural inhabitants and its foreign inhabitants, Chappell does reserve parts of the body as being more or less private. The digestive tract, however, remains open to exploration and colonization.

Chappell's interior is impressively vast. The guide's journey ranges through a variety of bodily terrains, from the cavernous mouth to the mountainous esophagus and on through forests of nerve endings to the "suave semi-tropical valley, the Waist Lands" (21). The body Chappell's party explores is divided into a network of principalities and climate zones, such that the weather in each locale subtly evokes the functional role played by that part of the body. A side trip to Epidermis is breezy and humid, owing to the pores' open path to the warm world outside the body. The city of Peritoneum is portrayed as a bustling hub of commerce where the various foodstuffs traveling down the alimentary canal pile up until they can be shipped further on through the intestines.

The microbial world Twain depicts is vaster still. Huck and his microscopic friends worship Blitzowski in ontological terms, praising his insides as

wonderfully ragged, incredibly dirty; he is malicious, malignant, vengeful, treacherous, he was born a thief, and will die one; he is unspeakably profane, his body is a sewer, a reek of decay, a charnel house, and contains swarming nations of all the different kinds of germ-vermin that have been invented for the contentment of man. He is their world, their globe, lord of their universe, its jewel, its marvel, its miracle, its masterpiece. (436)

The descriptive duality here, casting Blitzowski's body-universe as both sewer and jewel, reiterates shit's oscillation between filthy and healthy matter. Similar work is done by Twain's pairing of "germ-vermin" with the "contentment of man," which reflects the interplay microbes' role as contagion, established by germ theory, and the salutary role gut flora play in regulating bodily conditions.

All of this is wrapped up in the unimaginable scale of the world inside Blitzowski, which, or who, is big enough to host life in the billions. Twain divides his interior into "upwards of a thousand republics...and as many as thirty thousand monarchies" (438), and in fact the crux of the plot rests on the notion that the body is too vast for the inhabitants of one area to recognize the customs of another. When Huck is first injected into Blitzowski's body, he attributes his odd manner of speech to having emigrated from the Major Molar, an area of the body suitably distant from the torso that none of his companions are able to challenge his story. His later plot to mine for gold in a filling in the Major Molar deploys the same gambit. Huck originally suggests the plan to distract his friends from closer-to-home demands on his backstory, assuming that the distance from gut to mouth would be conducive to speculation but prohibitive to action. Huck is not, however, immune to his own persuasion. He ultimately believes his own tall tale about the gold in Blitzowski's teeth, suggesting that even he, whose human knowledge of the limits of the body-world far exceed the microbes', has been seduced by the unfathomable scale of the interior world.

Despite this variation in scale, these early fecological narratives dwell on the tension between the body's cavernous and continental qualities. Chappell and Twain both seize on the dialectic of constrained openness within the body as their primary interest in narrating these interior worlds. Narratologists have long followed Gérard Genette's *Narrative Discourse: An*

Essay in Method in using the term "metalepsis" to refer to the boundaries between worlds of a narrative and the transgressions thereof. The fecological body plays with a type of material metalepsis, which aligns the playful narrativity of embeddedness with the physical discourse of life as an assemblage of microscopic agents. These bodies' material metaleptic power resides in the barrier erected by the skin when viewed from the inside. The vast exterior looms over and outside the interior, which, though constrained, is shown to be comparably expansive – a bodyscape both cavernous and continental. This cavernous quality may be taken as a deferral to the translation of scale and diversion of human perspective necessary to enter such spaces, whereas its continental scope gestures toward the immense promise implied by this same work of translation.

This paradox of embedded infinity emerges from the author's doubling of the human as character and setting, which is the primary characteristic of the fecological body narrative. Moreover, the narrative layering that juxtaposes recognizable bodies with the imagined worlds they contain illustrates how fecological bodies enact the same heterotopic tension between the real and the illusory that Foucault ascribes to mirrors and graveyards. Twain's and Chappell's askew references to the strict calculations that define their bodily settings from a scientific perspective plays with the narrative power that inheres in such quantifications; the fecological body, in other words, simultaneously draws on and makes light of the work of abstraction necessary to bring the human perspective to the microbial plane. And though the mix of ecology and anatomy is played for laughs throughout these texts, the reflections engendered by this juxtaposition are not. Praise for the body voiced from the inside remains relevant even on the outside. To Twain's microbes, for instance, the body they inhabit is "a vast and wonderful world" and it is a "pity that this poor forlorn old tramp will never know [of the microbes' pride

in him], for compliments are scarce with him" (437). In this, Twain imagines that the universal importance that the body holds for its guts' inhabitants might convey an esteem that is measurable on the human scale as well and only activated by blurring the boundary between self and setting.

This oscillation between scales is condition of entry into fecological spaces, where aporia reigns. The early reviewer Van Wyck Brooks was nonplussed by the fragments of "Microbes" he read through Albert Bigelow Paine's seminal biography of Mark Twain. Writing for *The Dial* in 1920, Brooks criticized Twain's oscillation "between the posture of Gulliver in Lilliput and the posture of Gulliver in Brobdingnag" and argues that such narratives of magnification or minimization require "a measure, an ideal norm, which Mark Twain, with his rudimentary sense of proportion, never attained" (442). I view Twain's sense of proportion more generously. The fecological body is fundamentally opposed to Van Wyck Brooks and his calls for an "ideal norm" of the body. Seeing the bodily interior as a heterotopic site reiterates the degree to which placing action in turdspace rejects a sense of the body as ever collapsible to a single prevailing characteristic or quality. The narrated interior is a site of ubiquitous uncertainty and intense play. As Chappell's narrator notes in the opening pages of *Alimentary*, his group of four is "ideal for the Interior [because] Five is too many, three too few...for bridge, for instance" (3). Chappell constructs a view of the intestines as a social site, characterized by permeability, in which disparate actors interact with consequences both serious and silly. Rather than seeing this as an inconsequential joke or lack of proportion, I argue for ambiguity and play as a fundamental feature of the bodies these texts narrate.

In many cases, this sense of play manifests as a slippery temporality within the body. I have previously mentioned Twain's play with time throughout "Microbes," but to refer to it as

fleetingly as I have thus far does a disservice to the importance it plays within the text. Huck's transformation to a cholera germ doubles his experience of time. He remains fully human and able to count his time inside Blitzowski by the hour, day, and week, while simultaneously tracking the passage of years, centuries, and millennia as a microbe. The slippage of time between these two perspectives drives Huck's reflections on his integration into Sooflasky society. The millennia he spends as a germ condition his human thoughts about microbial life. "Three weeks ago," he writes, "I was a man myself, and thought and felt as men think and feel; but I have lived 3,000 years since then, and I see the foolishness of it now" (448). The complex way that Twain records the interval within the intestines as having contained *both* three weeks and three millennia revels in the fecological body's capacity to engender and sustain doubleness.

Though Twain's text is unfinished, there is much to suggest that these competing time scales figured prominently into his future plans for the novel. He subtitled the work "With Notes Added by the Same Hand 7,000 Years Later," and the extant text includes several notes adding commentary several millennia – or, in human terms, weeks – later. These footnotes are all prefaced with the amount of time after the original recording that they were added, varying between five and seven thousand years after. In one instance, Huck appends a note "2,000 years still later" to commentary written 5,000 years after the principal text, which dismisses the first note as "an error. I had not given the matter sufficient thought at that time" (441). John Tuckey notes that Twain added this second note to the draft "after he was more than half way through the story" (441 n. 7), suggesting that as the story continued to evolve it would have delved deeper into the morass of the dual-natured Huck narrating and reflecting on his narration in the same space over a timespan simultaneously brief and transhistoric.

Time passes differently within the fecological body. Chappell joins Twain in this temporal play, including moments where the passage of time is made ambiguous in a way that may be attributed to the bodily setting. As Chappell's explorers make themselves comfortable at the guide's villa on the River Bile, time begins to pass differently. The longer they stay, "the more difficult it [becomes] to tear [themselves] away" (97). The group's botanist attributes the temporal effect to their surroundings, murmuring "Lotus-land" to the approval of the group (97). Michel Foucault would likely agree with him, as heterogeneous spaces always contain a temporal aspect. They open, he notes, "open onto what might be termed, for the sake of symmetry, heterochronies" (6). He imagines the function of heterotopia to be the offer of "a sort of absolute break with their traditional time" (6). Nash's elaboration of the ecological body in contradistinction to what she calls the modern body imagines a similar break from "traditional time." These breaks are not made by casting the body as a timeless place, though. Rather, the interior is shown to be full of and fully in time, or times.

Temporal uncertainty, moreover, is only one example among many. These interior spaces abound in material whimsy as well. Huck's doubled perspective affects him materially as well as temporally. He finds that he is "become a real cholera germ, not an imitation one" (435), and shortly thereafter finds himself increasingly attuned to his new intestinal ontology. Huck enjoys fits of microbial patriotism in which he acts and feels as "the germiest of the germy" (435). He feels proud of the tramp he calls home whenever "the soul of the cholera-germ possesses" him but holds his nose whenever his "man-nature invades [him]" (437). This type of cosmological play drives "Microbes," and through it Twain suggests that calls for proportion may be unsuited for a world where human life is increasingly shown to be grounded in microscopic symbiosis rather than the aloof product of visible materiality and singular subjecthood.

This playfulness extends into the microbial world Huck shapes with his presence. He renames his closest friends among the microbes from a list of his favorite literary characters, such that for the remainder of the text his travels through the body are accompanied – and complicated - by such recognizable figures as Lemuel Gulliver, Sancho Panza, and David Copperfield. Twain is particularly cagey here in adding Huck to this list; though he first explains it as an abbreviation of the narrator's middle name, he also inserts Huck the cholera germ into his list of microbes with their literary names between King Herod the diphtheria germ and Don Quixotte (sic) of the recurrent fever family (472). To further complicate the intertextual morass on display here, Twain inserts his own oeuvre into the narrative when Huck remembers, in his human life, having read several books by "Twain... Twain... what was his other name? Mike? I think it was Mike" (456). This profusion of alternate names, doubled identities, and metaliterary interweaving is, again, attributed to the bodily setting of the story. In response, the text that narrates that body is structured to embrace duality without synthesis.

Exploring the human from the inside invites repercussions that oscillate between silly and serious. Chappell strikes this balance in his depiction of the phagocytes as simultaneously the ferocious predator of the alimentary canal, the stalwart protector of human health, and the trophy par excellence of the fishing enthusiast on the Interior. A substantial portion of his journey through the body depicts the bravado of sport fishing for various immunological cells. The guide hires a local angler Plasma for a fishing expedition in the bloodstream, ⁴³ who

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⁴² Tuckey notes that the earliest draft of the holograph had "Mark Twain" as the name here before changing it to Huck. Given that this would have contradicted the earlier joke about "Mike Twain," the text is certainly strengthened by the revision. The discrepancy here makes it abundantly clear that Twain was committed to complicating "Microbes" by inserting himself in some form, regardless of what form that self-referential play might have ultimately taken.

⁴³ One has to smile when reading *Alimentary* alongside "Microbes." The guide's description of the bait they'll use to catch phagocytes recalls Twain's list of the family crests and literary aliases of his microbial characters, and includes a note that, of all the various fishing flies at their disposal, the "spidery, gray-and-red Cholera Germ was [most] repellent" (41). The cholera germ also happens to be "the most difficult [lure] to tie" (41). Whether this

immediately tempers the intemperate joy of the trip with a reminder of danger posed by their quarry. Once a phagocyte is hooked, Plasma tells the group, "[i]f you don't get him out he'll get you in, and then..." (41), with the suggestive pause at the end indicating that the outcome will be gruesome, if unspecified. Chappell follows this with a detailed description of striking and reeling in a large phagocyte specimen, relying on the tension between his nuanced action description and the atypical setting and game to cultivate a sense of absurd humor. While the juxtaposition of this type of outdoors narrative with its eminently interior setting is a regular source of smirking humor throughout the narrative, it also demonstrates Chappell's prevailing interest in the duality of the bodily interior as a site of sophisticated immunological responses and narrative whimsy.

The body Chappell's group explores is similarly resistant to easy binaries. Though the guide insists on anonymity, he is still aware that "the individual whom we explored... [might feel] somewhat distressed at times by our presence in his midst" (3; emphasis added). One of the party's first mishaps is a perilous climb around the body's pronounced Adam's apple, which further codes the bodyscape as masculine. Later, however, the guide takes them through an area near the body's midriff that "slopes up to the Grand Tetons, a brace of impressive monadnocks on the northern horizon" that is known as the "heart of the dairy industry" (66). Individual organs within the body are gendered differently as well. Expressing gratitude to the Great Omentum who governs passage from the stomach to the bowels, the guide wishes "more power to him" (78), while the Epiglottis and Thorax are praised as "Queens of Commerce" (35). While the characters of the novel are predominately male, such that the social scene in the various

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callback to Huck the cholera germ is intentional or incidental, it does add some wry humor to a study that includes both texts.

locales the guides visits is strongly suggestive of a boy's club,⁴⁴ the topography of the body itself is shown to be decidedly fluid.⁴⁵

I have certainly cast a wide net here in outlining the forms of this narrative play, but that is intended to show how broad the effect of this principle of uncertainty is within the world of the fecological body. A prevailing feature of these bodies is that the fabric of their universe is woven with ambiguity. Rather than fixing the body as a site of strict categorization, these narratives show a bodily environment that is ever in flux. This must surely recall Bakhtin's description of the grotesque body as "not a closed completed unit; it is unfinished, outgrows itself, transgresses its own limits" (26); elsewhere, he calls the grotesque "a body in the act of becoming. It is never finished, never completed" (317). This unfinished, open quality of my fecological body is clearly indebted to these formulations of the grotesque, though my thinking diverts meaningfully from Bakhtin's in that he maintains the human as the basic unit of his ontological inversions, whereas my work here and throughout this dissertation is to remain attentive to the ways that the gut punctures the very idea of the human as a meaningfully singular entity. Bakhtin celebrates the carnivalesque as "the laughter of all the people" (11), but I am deploying the fecological in order to remain attentive to the ways that the laughter of the people rings with many tiny voices that emanate from the turdspace of the bodily interior as well. Though Bakhtin calls carnival laughter

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⁴⁴ I return to this gender disparity in the Conclusion of this chapter to question who explores bodies, and whose bodies are explored, in these texts.

⁴⁵ In selecting the texts to focus on for this chapter, I struggled to find examples of bodies and their explorers that were not explicitly masculine. Twain's Blitzowski is undoubtedly male, as is Orton's giant with his monumental penis. The body Chappell's party explores is, as I have said, referred to as male as well, though the juxtaposition of male and female anatomical features blurs this line slightly. The characters who travel these bodies are subject to the same gendered critique. While all the texts here considered include women who are native to the bodily setting, Nathanael West's Miss McGeeney is the sole female figure who enters and travels through a body from the outside. When considered in tandem with the complete invisibility of non-white characters in these texts, it is clear that deeper thinking on the politics of these narratives is needed. While the portrayal of the body as an ambiguous space deconstructs the clinical and normative discourses that support white patriarchy, it is equally sure that these anticlinical narratives continue to be steeped in certain presumptions of racial and gendered authority. More work is surely needed to assess how these masculine paths through the interior determine the body they inscribe.

"universal in scope" (12), the universe he thus describes only starts at the scale of the human, which the fecological narrative shows to be untenably shortsighted.

By pairing these grotesque narrative examples with the type of spatial study proffered by Nash's ecological body and Foucault's heterotopia, the ambiguous fecological space bleeds into the world, such that it exerts a continuous present outside the specialized time of the carnival, as Bakhtin defines. In such a light, bodies are continuously contradictory, not clinical, a site of plurality and potentiality. Twain and Chappell portray the body as a space that resists dialectical synthesis, a characterization that is shared in West's and Orton's own fecological narratives, which apply the principles of fecological exploration to explicitly nonhuman bodies. This, I argue, provides a rough sketch of the ways that the methodological and epistemological investments involved in my scatological perspective can be applied in contexts wider than the strictly gastroenterological. That is, through the examples West and Orton provide in the next section, I hope to show how the human displacement at the heart of the fecological can be applied outwardly, so that fecological exploration ceases to be merely introspective and instead offers a means by which to navigate the guts of larger structures and entities as well.

Inhuman Spaces: Fecological Journeys in West and Orton

Nathanael West historicizes his fecological exploration very differently than Twain or Chappell. *The Dream Life of Balso Snell* does not respond to an immediate crisis in medical or political discourse, but rather more generally to the aesthetic flux of the modernist movement; that is, West contextualizes his fecological body narratives against the excesses of high modernism. Whereas Twain and Chappell journeyed through a human body in response to the microbiological revolution, West deploys the genre to inhabit Trojan Horse and reflect on the

state of experimental literature in the 1920s and 30s. 46 As West's protagonist Balso searches for a way into the body of the Horse, he finds the head to be out of his reach, so he settles instead for entering by "the posterior opening of the alimentary canal" (3). Entering through this posterior opening, he exclaims, "O Anus Mirabilis!" (3), an obvious pun on annus mirabilis, the Latin phrase for "miraculous year." Jason Marley reads this exclamation as a signifier of West's interest in the very question of genre in the age of modernism throughout the novella. Marley suggests that the collapse from high to low culture in the removal of the letter "n" here shifts the site of the traditional epic – the Greek myth of the Trojan horse – from the mouth to the asshole in order to render the traditional generic boundaries untenable. Though Marley does well by couching his analysis in terms of the ideology of genre, his sustained focus on West's pastiche and the genres and texts it skewers is consistent with the general trend of scholarship on West's debut novel. Deborah Wyrick sees the novel as a self-referential experiment with Dadaist collage. Jonathan Veitch emphasizes the novel's "critique of nothing less than the grand tradition of Western culture upon which it depends" (27). Tom Cerasulo attempts to revise this earlier commentary on the novel by focusing on West's pastiche of recognizable modernist texts but attributing the method to the author's professional self-doubt instead of a critique of the literary milieu he was trying to enter.

Taken together, the vein of scholarship that reads *The Dream Life of Balso Snell* offers a compelling argument, and one I don't intend to challenge. I would, however, emphasize that this

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⁴⁶ Lest it be said that West's setting, as a built artifact, departs too greatly from the anatomical foundation set by Twain and Chappell, let me emphasize the lengths West goes to in depicting the equine interior in anatomical terms. Balso first enters into the "foyer-like lower intestine" (6). Though he remains cognizant of the Horse as a constrained built space, complaining of "criminally backward" exposed plumbing he sees around him as he advances through the "great tunnel" (8, 9), his attention never wavers from the type of ecological/anatomical blurring by which the fecological narrative is defined. As he delves further into the body, however, his environs expand. Following a "bend in the intestine" (13), he crosses through a forest, where he finds a packet of letters hidden in a hollow tree, and then into a town complete with public fountain and café and surrounded by enough undergrowth to conceal the tryst with which the novella closes.

type of reflection all such arguments revolve around historical spatialization – that is, around recasting a temporal influence in physical terms. Marley reads the transformation of annus to anus as a move from high to low, but it is equally important to recognize this as a shift from when to where. Balso's portal into the body invokes historicity by recalling the year as a measurement of time. Catherine Merrill also reminds us that West is "punning outrageously" on Dryden's "Annus Mirabilis" poem here (70), which itself is doubly temporal: the subject of the poem is the year 1666, and its canonical footprint is steeped in a literary engagement with history. Despite all this temporal play, the miraculous asshole is eminently physical. Merrill also emphasizes the "fleshy 'thingness' of [Balso's] pathway" (70), which is strongly foregrounded as Balso enters the horse. The fleshiness of the fecological narrative's setting constantly conditions our reaction to the text's engagement with the temporal contexts it embodies. West renders history as the body his characters inhabit, explore, and transgress against. To cast history in the flesh in this way, particularly within a text that emphasizes the instability of form as much as West's does and within a genre as attentive to the polyvocality of bodies as the fecological narrative is, helps West to thwart a singular voice of history. By connecting his characters' inability to attain any consistent state of bodily interiority to his well-attested resistance to the concept of psychological or emotional interiority, West ponders, without much cause for optimism, the coherence of any narrative of historical progression that may be built upon such fundamentally unstable ground as the human body. That West sets his fecological narrative within the Trojan Horse, easily recognizable as a stand-in for the grand narrative of history through conquest, reiterates his interest in expanding ambiguity of fecological time beyond its bodily confines. That is, West suggests that the instability of time and space within the body

must leak inexorably into the times and spaces within which such bodies are situated, resulting in a plurality of times that borders on the atemporal.

Jason Marley traces this sense of atemporality throughout *The Dream Life of Balso Snell*, though in this case the problem of time within the body is that it becomes recursive rather than irregular. Marley notes that the vignettes and characters within the novella seem to recur and repeat themselves, such that "possess[es] no permanency" (165). As a result, West's characters are subject to "a drastically shortened longevity that is soon forgotten" (165). We can deepen this insight with examples, particularly the extended dream sequence from which the novella draws its name. Nearly half of the narrative takes place in a dream Balso has after falling asleep in a café in the horse's intestine, in which he reads several letters from the playboy Beagle Darwin to his jilted lover, a "beautiful hunchback" named Janey Davenport (37). Beagle's letters attempt to justify his decision not to invite Janey with him to Paris by postulating how that experience would have unfolded, complete with Janey's clumsy death and the social awkwardness Beagle would have to endure as a result. When Balso awakes, he is greeted by Miss McGeeney, who informs him that the letters he just read in his dream form part of an epistolary novel she is writing. With this, West creates and abandons timelines and narrative levels with abandon. Balso's dream creates the intradiegetic timeline of the story-within-the-story, which is further complicated by its speculation on an alternate past that might have unfolded, but didn't. Miss McGeeney further muddies the waters by revealing that Balso's reading also may be measured on the diegetic timeline of the intestinal café where he has been sleeping. The drama between Beagle and Janey thus enters a temporal limbo where their quarrel decidedly has and has not happened.

This is of a kind with the temporal duality Twain deploys, and, as in "Microbes," it is accompanied by a great deal of material fluidity as well. Characters transform drastically and regularly in *The Dream Life of Balso Snell* and *Head to Toe* alike. The manuscript Balso reads by John Raskolnikov Gilson ends by describing the author's murder of a coworker and subsequent transformation into a young girl. Balso witnesses a similar transformation himself firsthand, when Miss McGeeney reveals herself to be his childhood love Mary. Finding his lost paramour again within the body effects a change in her; she becomes "[n]o longer...dry and stick-like, but a woman, warmly moist" (57). West depicts this mutability of form as a function of the plane of ambiguity circumscribed by the body, which is particularly amenable to forms in flux. The ubiquity of this slippery kind of narrative play suggests an affinity between the bodily interior and representations of uncertainty that continues well into the long century of shit, even after the initial shock of microbial discovery fades.

Orton's Gombold experiences two such moments during his tenure inside the giant he inhabits and explores over the course of several years in *Head to Toe*. When he is first imprisoned for his role in a violent uprising against the female government of the body, his time of incarceration slips by haphazardly. Orton skips forward by leaps and bounds, with a "tenminute wait" shortly followed by a night that passes in the interval between a deep breath and the first light of day (60). After a brief appeal to the governor for clemency, the plot again jumps forward a day and then a month, both without warning. This culminates in "[s]everal years" spent digging a tunnel to escape his prison, the passage of which unfolds in a single sentence. Time slips again when Gombold joins the Leftbuttocks army, when "the next three weeks" and then "six more months" pass suddenly (131). Orton's rapid shifts in narrative pacing portray time

spent in the body as an uneven experience, replacing the familiar flow of one moment to the next with sudden and unpredictable lurches forward.

Orton plays with the variation of appearance to greater effect, due in part to his greater interest in gender expression throughout the text. The giant is clearly coded as male by Orton's description of his monumental penis, which comprises a "world of its own; beautiful and menacing. A vast erection of the earth" (102). The explicitly masculine outer surface of Orton's fecological world contrasts markedly with the composition of its interior space, which is governed by a powerful matriarchy. This gender play continues throughout the body. Gombold enters the body under the supervision of Connie, the powerful chief of police who, once inside, inverts the gender dynamic of their relationship by insisting that he dress in aprons and skirts. When Gombold tells her she is "a strong woman," she corrects him: "I am your husband" (32). At this same time in the novel, Gombold is visited by a man, woman, and child who alternate between being indistinguishable and so clearly different that "[t]o pretend they were one and the same was absurd" (30). At their first meeting, Gombold insists that he has "no difficulty in distinguishing a man and a youth from a woman" (29); the next time he meets the group, they are "so alike that he could not tell one from another" (32). Once the man in the group insists on seeing Gombold's genitals, he realizes again that this is "no woman" (35). The rapid shift between gendered identities emphasizes that the area inside the giant's body is marked by the flexibility of form among its inhabitants, and also suggests one way that the vibrant hybridity of the bodily interior can be used to decenter constructions of gender as a univocal expression that permeates bodily identity unilaterally.

I have suggested that the gradual acceptance of an ever-present base population of microbes might explain the transposition of fecological principles from the human confines of

Twain and Chappell's texts to the inhuman bodies that West and Orton explore. This would then position The Dream Life of Balso Snell and Head to Toe as explorations of the leaking of these newly pluralized human identities into the world at large. This completes my reversal of Nash's ecological body, which measured health in the way environmental factors permeated the bodily interior, by remaining attentive to the emergence of interior entities and ideas in outside spaces. C.W.E. Bigsby and Maurice Charney have both pointed out that *Head to Toe* riffs on *The Dream* Life of Balso Snell directly by having Gombold find and enter the Trojan Horse in the belly of the giant. Orton does more than borrow West's setting, however. In many ways, Head to Toe follows West's example in his satire of the high culture of literature. Charney traces a Westian procession through slant versions of the Western canon in Orton, noting that Doktor von Pregnant, the purveyor of this litany, is "a ridiculously ineffectual figure" (31). Gombold's growing extremism within the giant's body makes clear the author's dissatisfaction with the empty literature he parodies clear. Gombold and his compatriots eventually realize that their violent tactics have been "useless" and turn from action to words, having "unearthed accounts of the damage words had done in the past" (175). He doubts that a book could have the revolutionary effect he seeks, since it "would vibrate the structure, but not enough. To be destructive, words had to be irrefutable" (175). Orton's desire to vibrate the structure, along with the self-reflexive doubt in the power of literature to be sufficiently devastating, positions *Head to* Toe as a sorely needed but underwhelming response to the staid oppression of 60's-era British culture. Orton's biographer John Lahr insists on reading the novel in this allegorical sense, and Göran Nieragden follows suit, revealing the "signs of Orton's dissatisfaction with the general politics of his day" that permeate the novel (350).

Notably, Orton makes subtle but substantial references to the way that his literary exploration of the giant's body plays with anatomical renderings of the same space, suggesting a kinship between his broad satire and the medical parody Twain and Chappell present. As Gombold makes his escape from a Leftbuttocks prison camp with his fellow deserters Pill and O'Scullion, the companions find themselves lost in a swamp somewhere in the bod. O'Scullion saves the day by revealing "a small knowledge of anatomy" which suggests "that they were now in the region of the pelvic colon or sigmoid flexure" (150). Given that Orton's text is based on literary exploration, it stands out here that his character names a competing tool for mapping the body. The comic dissonance in this moment originates in the metafictional suggestion that the means by which the group has previously navigated the body drew on some other resource. Orton here foregrounds the epistemological break the fecological body employs in order to emphasize the availability of multiple paths through the body.

This fluidity extends even to the boundary between the real and the imagined for both West and Orton. Balso and Gombold share strikingly similar moments early in their trips into their respective bodies where they expect to meet the products of their imagination in person. Gombold's journey through the body begins, as I have said, on the head, where his first encounter is with a strange creature trapped in a deep pore. After pulling the stranger out of the hole, Gombold "wonder[s] which minion of his invention this could be" (6), running through a list of characters he has previously imagined quickly in his head. Balso, similarly, enters the grand atrium of the horse's intestines and immediately thinks

of the Phoenix Excrementi, a race of men he had invented one Sunday afternoon while in bed, and tremble[s], thinking he might well meet one in this place. And he ha[s] good cause to tremble, for the Phoenix Excrementi eat themselves, digest themselves, and give birth to themselves by evacuating their bowels. (5)

As both of these novels are filled with characters and situations still recognizable from the source texts from which they were lifted, these two moments stand out for showing the barrier to the world inside the body to be permeable to fictional characters *in universe* as well. Gombold and Balso realize the fecological body's openness to their imaginative creations intuitively, suggesting that this permeability is not only foundational to these worlds but also readily evident to the characters inhabiting them.

The language of leakage that I use to describe this expansion of fecological principles is not chosen idly. As I will now argue, the ubiquitous ambiguity and heterogeneity that is ubiquitous throughout Twain's, Chappell's, West's, and Orton's depictions of the interior bodyscape is inextricable from the excremental imagery that absolutely dominates each of these texts. I previously tweaked Soja's concept of thirdspace in order to describe this bodily plane as turdspace in order to indicate that this heterotopic depiction of bodily spaces is fundamentally reliant upon excremental processes, products, and logic. The body is a shitty place, and I want now to emphasize that that is no accident.

"He might liken this house of ordure to the world": The Fecal Foundation of the Fecological Body

Much of the recent scholarship on *The Dream Life of Balso Snell* explicitly attempts to revise Stanley Edgar Hyman's midcentury critique of the novel. According to Hyman, the flaws of West's debut novel are "all characteristically juvenile. The principal one is the obsessive scatology, which soon becomes boring" (15). This accusation of "obsessive scatology" appears

time and again in numerous essays aiming to show the novel to be more than mere excrement. Deborah Wyrick cites Hyman as one of the "critics [who] agree that it is formless, chaotic, a juvenile pastiche of bathroom jokes" (349). Jason Marley and Tom Cerasulo both cite this very line from Wyrick, rebuking Hyman's obsessive scatology at one step removed. Marley follows this with an admirable close reading of the novel's scatological beginning, but subtends the scatological to the broader work of genre critique that he attributes to West throughout his essay. Catherine Merrill addresses Hyman directly, arguing that, far from a juvenile distraction, "the novel's scatology is absolutely necessary to its structure, as well as its imagery" (71).

For a project like mine, Merrill's frank embrace of excrement in her argument is a welcome surprise, but her explanation of its necessity within the text is underwhelming. She claims that the twists in the horse's alimentary canal inform the structure of the novel, based on a new sudden encounter around every corner. This is an intriguing idea sorely in need of explication; in its current form, it hardly explains why Balso's dream life unfolds in a horse's twisted bowels rather than, for instance, the labyrinth of Minos. She suggests that West's scatology could be "thematic, too, suggesting that all of Western culture amounts to no more than the excretions of humanity" (71), which does little more than paraphrase West's in-text quotation of George Moore from *Confessions of a Young Man*: "Art is not nature, but rather nature digested. Art is a sublime excrement" (West 8). In this section of the chapter, I follow Merrill's example in finding excrement at the heart of these narratives. I hope, though, to be more successful in articulating the foundational role that shit plays for entering and traveling the fecological body. West's novel, read with Orton's, Twain's, and Chappell's, reveals an ontological fixation on bodily waste that, contra Stanley Hyman, is anything but boring. Rather,

as each of these authors constructs a world of the body, neither heart nor brain but shit rests at the center.

Invoking the bodily axis of brain-heart-guts in this way recalls Twain's republic of Getrichquick, whose benevolent assimilation of a small chain of islands initiates the epoch of imperialism within Blitzowski. This new policy of expansion is framed expressly in response to the reputations enjoyed by the peoples of the heart and the head. Gut microbes learn shame watching the "great Heartland sending the refreshing blood of her gracious Civilization to many a dark and neglected nation rotting in debasing indolence and oriental luxury upon the confines of Blitzowski and requiring nothing in return but subjection and revenue," while "imperial Henryland, far away in the desolate North gradually and surely spread[s] its dominion down the planet flat expanse from the Shoulder Range to the lofty land of the Far South – the 'Majestic Dome' of the poet and the traveler – distributing happiness and pus all the way" (443). As a result, they agree to hoist their flag over the archipelago, celebrating the coup as though they "had been annexing four comets and a constellation" (444).

This imperial conquest is couched in profoundly fecal terms. Huck describes the archipelago as "a collection of mud islets inhabited by those harmless bacilli which are the food of the fierce *hispaniola sataniensis*, whose excretions are the instrument appointed to propagate disease in the human trigonum" (443). In Twain's holograph, the body of water surrounding this archipelago of excremental islands is named the Great Stale Sea. The liquid imagery of the sea, compared with its intestinal locale, recalls staleness as the marker of "urine, manure, straw, etc." (OED). John Tuckey changes this body of "water" to the Great *Lone* Sea throughout the body of the text, however, following a comment in Twain's working notes (pg. 443, note 8). This is fairly consistent with Tuckey's approach to inconsistencies caused by the text's fragmentary, draft

status. It should not be overlooked, however, that this change from "Stale" to "Lone" is the only place where he chooses an emendation without a corresponding markup to the holograph itself. Nor did Twain himself seem willing to completely occlude the sea's excremental source. When Huck's microbe friends scoff at his description of the salt content of his world's oceans, he rebukes them by asking, "What makes your Great Lone Sea rancid?" (484, Twain's italics). He continues to note that the source of such a "miraculous quantity" of liquid is a "persistently and exasperatingly insolvable" riddle (484), strongly suggesting that Twain's revised plan for the Sea may have been subtler but no less excremental.

At the center of Blitzowski's body-universe, then, is a chain of fecal islands surrounded by a sea of urine, the imperial conquest of which determines the historical frame of the novel. This is far from the only equation of excrement with authority within the body, however. Twain attributes Getrichquick's power to both ends of the digestive tract, noting that the country "imports raw materials from the North and ships the manufactured product to all the great nations lying toward the South" (442-443). Excrement is cast here as the product of digestion, rather than its byproduct, and through its production and circulation the gut emerges as a significant site of commerce and cultural exchange between the various organs and organisms within Blitzowski.

Like Twain, Chappell depicts the alimentary canal as the primary route of commerce into the body; the oral gateway through which they enter opens "only periodically for the discharge of slightly used ether... or for the admission of cargoes of supplies destined for ports-of-call along the Canal and its tributaries during the course of its windings toward the sea" (23). To evoke the bowels' "windings toward the sea" evinces a clear awareness that matter that enters the body as food must inevitably exit as feces. In such a view, the mouth becomes a path through

the body but only by dint of its connection, after many windings, to the asshole. The party's path of ingress to the body thus requires them to cast themselves as shit, or at least shittable.

This colors the group's time in the body brown, and applies a strict excrementalism to the ways the guide and his companions interact with each other and their surroundings. Chappell's attention to the excremental inevitability of his characters' journey is consistent throughout the text. At times he plays this for laughs. The novella opens with a chapter titled "We Go to the Head." The language of motion here is misleading, however, as the group's journey does not begin in earnest until the fifth chapter; instead, the first four are devoted to the guide's general musings on the physical traits of various bodies he has explored. He begins by reflecting on facial features, but the pun here with "going to the head" as euphemism for using the lavatory is unmistakable.⁴⁷ The trip to the interior thus begins by equating bodily exploration with excretory habits. That is, Chappell suggests that any trip through the body invokes the scatological. The guide later notes that, once in the Interior, "it is not always so easy to get out...nor so easy to stay in, for that matter" (93), again recalling the body's inexorable push of material to be excreted from inside to out. As entities foreign to the body, the group is destined to be expelled through an excretory opening. That the novel ends with an explosive vomit rather than defecation does not obscure the fact that the primary path through the body is inextricably tied to scatological processes and results.

Nor are the bodily functions they witness obscured by the group's closer vantage point.

The guide indicates an awareness of their progress through the body's digestive process and remarks at least once on their relative progress from food to shit. As the group approaches the

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⁴⁷ The *OED* notes that this colloquialism is both uniquely American and fairly specific to the mid-century period. The first attestation of this phrase in usage comes from a 1920 Congressional subcommittee hearing on war expenditures; the second is from *A Streetcar Named Desire*.

peritoneum, they pause to fish food items that are still recognizable as food out of the gastric stream:

Many bits of provender are jostled from the bolus loads and one of our favorite amusements was snaring choice additions to our larder as they floated jauntily by. In an hour of this sport I rescued a little hot-dog that was bravely battling the current and a moment later a wedge of cocoanut pie, almost as good as new, swam into my net. (76) It is an odd moment to be sure, and one that draws meaningfully on the absurd setting. To notice that this pie and sausage are "almost as good as new" subtly establishes that they are at least partially digested; thus, to earmark them as "additions to our larder" suggests that the group will be eating this material, partway through the digestive transformation from food to excrement. Foraging inside the body brings the narrative abreast of disgust. As William Ian Miller writes in The Anatomy of Disgust, "[o]nce food goes into the mouth it is magically transformed into the disgusting...it can only properly exit in the form of feces" (96). For the group to not only bring themselves into contact with this material, but to go the step further to ingesting it, reveals the extent to which this narrative looks forward to excrement. The guide and his coterie interrupt processes that ought to produce shit, even as they have subjected themselves to the same excremental destiny as their entry into the body. Chappell's dry wit partially – but only partially – obscures the subtle way in which he broaches the paradox of the interior narrative here. He invites reactions of disgust in his portrayal of ingested matter diverted from the narrow path toward excrement, but he also thwarts outright abjection by keeping this pre-coprophagia completely internalized. The humor of a moment like this in the text emerges from the tension between the common reading of the body's unseen surfaces as a plane of abjection and the new ability to see the same setting in social terms. Chappell indicates with passable clarity here that

the primary yield of expanding the anatomical to operate ecologically is to dwell in the spaces bodily spaces the way gut flora do.

Of course, even this sociality is subject to the same inevitably excremental end, as the cycle of ingestion to excretion governs Chappell's body at every level. As the guide meditates on the ferocious phagocytes he alternately hunts and flees, he dubs them "one of the most useful scavengers of the Interior" (40). He goes on to claim that without the phagocyte's

insatiable appetite the smaller feeder streams would become clogged with aquatic life, just as the Norwegian fiords fill to the brim with wild herring during the swarming season. But the phagocyte's greatest value lies in his unremitting warfare against all interlopers, germs, bacteria and other little strangers in our midst which he knows instinctively have no right to be there. He eats them by the billion. (40-41)

This emphasis of the cells' rapacity underscores Chappell's interest in the role that digestion in all forms plays in maintaining human life. Casting the shark-like predator as a scavenger here, feeding on offal throughout the body, casts the immune system as a form of waste management, whose "insatiable appetite" keeps the various paths through the body uncluttered. The phagocytic appetite maintains bodily health by restricting waste to the spaces designated for exterior presences – that is, the alimentary canal.

Alongside all this we must balance Chappell's portrayal of excretion as a necessary and inevitable complement to the processes of ingestion and digestion that open the Interior to exploration in the first place. Miller, again in *The Anatomy of Disgust*, sees the "anus as endpoint of the reductive digestive process [as] a democratizer" (99). His argument, however, proceeds from a close analysis of taboos of excrement against the body. Thus, when he writes that "[e]xcrement and the anus bring down the whole body, making it subservient to the anal" (99),

he means it as a condemnation. My aim thus far has been to agree with Miller's first point and differ with the second. Rather than bringing bodies down, these bodily narratives show how excrement, or rather the excremental perspective opened up by gut flora, brings bodies together, and opens them up as a place for cultural – again, broadly construed to reflect both its conventional and clinical meanings – and narrative play.

Joe Orton manifests this democratizing power of excrement in the bowels and bathrooms his characters turn to in order to move freely through the body in their war for "the independence of the body's members" (159). Gombold's greatest escapes all originate from excremental locations. He assassinates the Prime Minister by disguising himself in women's clothes to be able to attend her all-female cabinet meetings, which instigates a civil war within the body. Though the police are at first "baffled" by the Gombold's escape from the scene of the crime (49), Orton quickly points to the excremental route of escape: "[A] set of women's clothes had been discovered in a men's lavatory two streets away" (49), meaning that Gombold took advantage of the excremental location's inherent capacity for transformation in order to effect his escape.

His escape is, of course, short-lived, and Gombold shortly finds himself imprisoned for his role in the revolution. The site of his incarceration is, however, a privy within the larger prison complex, which provides a fundamental connection between the stall Gombold is locked into and the other, more open spaces of the body. While imprisoned there, Gombold meditates on how he "might liken this house of ordure to the world" (65), which fairly explicitly invites comparisons between the built space of the bathroom and the surrounding world within the giant's body. This comparative work is quickly strengthened when, with the help of Doktor von Pregnant, a fellow prisoner, Gombold exploits the excremental infrastructure to escape, digging

to freedom by tunneling into the sewer lines connected to the bathroom. ⁴⁸ Gombold evinces some awareness of the transitional power of the excremental path here, telling the Doktor that the tunnel he started "is in line with the main sewer. If we dig further we can break into the sewer and so escape" (75). That Orton plays with infrastructural paths for excrement within the body here should not obscure the fact that these alimentary channels are reliable throughout *Head to Toe* as a path through the body. Gombold's third escape, this time as a prisoner-of-war, replaces the built space of sewage infrastructure with the body's natural pathways for shit. As Gombold and his fellow prisoners flee their pursuers, "the idea of making a journey through the giant's bowels did not seem a bad one" (150); indeed, after several hours journeying through the intestinal swamp, the three again elude capture successfully. Consistent across all three instances here is the fact that these scatological zones allow for unfettered movement. Insofar as the intestinal tract exists to enable easy, open flows, it exerts a powerful allure for authors to center their voyages through the interior there.

Focusing on how the intestinal setting of these narratives informs their plot recalls David Alworth's work in *Site Reading: Fiction, Art, Social Form.* Alworth develops a concept of site specification at the intersection of ecology, sociology, and narrative. He follows Latour in arguing for an understanding of the way that social spaces construct and participate in the lives of the beings that inhabit them. His model of site reading, then, brings together sociological and literary examples to consider settings both "as determinants of sociality that invite sustained attention from novelists" and "as material environments that give rise to constellations of cultural artifacts" (20). Alworth site reads several archetypical settings in postmodern American

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⁴⁸ This scene of Gombold digging to freedom through the sewer line in the bathroom where he is imprisoned should be seen as a connecting point between my interest in travel through the fecological body in this chapter and the use of sewage infrastructure to travel through the built space of the body politic in the one that follows.

literature, with chapters on supermarkets, dumps, roads, ruins, and asylums. I would suggest that, with Catherine Merrill's suggestion that Nathanael West's so-called obsessive scatology is "absolutely necessary to its structure, as well as to its imagery" in mind (71), we consider how West, along with Twain, Chappell, and Orton, invite a site reading of the fecological body in order to suggest that the operation of bodily narratives is akin to the operation of their setting, the guts.

Merrill lays the groundwork for this type of analysis in her suggestion that the "horse's alimentary canal provides the structure [of *The Dream Life of Balso Snell*]; each fold in the 'tunnel' is a new freakish encounter" (71). I have already suggested that I find this to be a promising direction for this type of study that is lacking in specificity, as it is indistinguishable from any other narrative that mirrors the twists and turns of the plot with a labyrinthine setting. In his chapter on dumps and *Naked Lunch*, Alworth asks "what form...the novel [would] take if, instead of merely including the dump as a setting or a symbol, it aspired *to be* a kind of dump itself" (52). This is the question that Merrill suggests, and one that I hope this exegesis of the excrementality of these bodily narratives helps to answer.

Alworth directs our attention to the narrative counterforce that "blurs the line between character and setting to disclose the Lukácsian mesh as an assemblage of humans and nonhumans" (18). The central conceit of *Site Reading* is the focused analysis of such assemblages, especially how they manifest "in and through a site that is especially important to a given story" (18). In the texts at the heart of this chapter, the site is the story, which makes Alworth's model a particularly appealing one to follow. When the text is structured to fit its intestinal setting, the bowels' role in facilitating linear movement throughout the body provides the foundation for the narrative work of moving through the body toward a resolution. The

linearity of the intestinal tract would seem to impose a fairly conventional, straightforward structure on such narratives, but the close association between feces and formlessness engenders the type of play and hybridity I detailed in the previous section, such that these texts can combine the procedural inevitabilities of the ingestion-digestion-excretion triad while still entertaining dualities.

In his essay on "The Use Value of D.A.F. de Sade," Georges Bataille theorizes heterology, which he describes as being "opposed to any homogeneous representation of the world" and "the complete reversal of the philosophical process, which ceases to be the instrument of appropriation, and now serves excretion" (Visions 97; italics Bataille's), through bodily waste. I am drawing on a twofold response to my four texts here: first, recognizing the ubiquitous excrementality of each and, second, recalling the heterology of shit. Shitty thinking permeates the worlds inside these bodies, and as a result the heterological view of the bodily interior dominates these texts. Even when the setting is anatomically distinct from the alimentary tract, it remains conceptually grounded there.

Let me conclude this section, and shortly this chapter, by returning to Stanley Edgar Hyman. He critiqued *The Dream Life of Balso Snell* for its excremental excesses, as though the former could be separated from the latter. When West's novel is viewed alongside others it resembles in tone and setting, it becomes clear that scatology is the lynchpin for imagining the body in spatial and heterological terms. While any claims that the bodily interior is *only* conceivable in excremental terms would be untenable, the sizeable body of texts in the genre that do rely on shit as their point of entry to the narrative space suggests a unique affinity between the body's wasteways and the imagination of its interior spaces in world-like terms.

It is in recognition of this shared reliance on excrement and excremental logic to hone the narrative ability to move through the heterogeneous planes of the body that I have named the fecological body. I am bringing together the fecal with the ecological to think about how cultural perspectives on shit inform the ways we think about bodies and our own dual actions as both explorers and explored. This duality is important to the corrective work I am attempting in response to the ecological conceptualizations of the body to which this chapter responds; through shit, we remember that bodies are open on the inside as well as to the outside. Following Twain, Chappell, West, and Orton in their use of the excremental gaze to gain entry to the interior reveals an inherent spatiality to scatological study. Pairing it, moreover, with the analysis of the bodily interior as narrative setting establishes a continuity between the spaces of the intestinal microbiome and the interpersonal macrocosm.

"Inside and out": A Conclusion

As I have said throughout this chapter, the fecological body differs from the ecological body in that the latter focuses on the body in space, whereas the former focuses on the body as space. This is, I argue, a tectonic shift, as it shows the body, and embodied identities, to be an important, and critically overlooked, site of alterity within the larger domain of spatial studies. The fecological body in this way must yield more than a mere shorthand for inevitable plot details. My goal in this chapter – indeed, my goal for this dissertation writ large – is to propose various ways to respond to and deploy the hybridity and plurality that inheres in the human microbiome and manifests most often and most memorably in bodily waste.

One exciting repercussion of this work is that it begins to sketch a critical apparatus for thinking about excrement inside bodies. Scatology has historically restricted itself to the study of

excrement after it emerges from the privacy of the body into the social space. For instance, in her seminal Powers of Horror: An Essay on Abjection, Julia Kristeva addresses the psychological threat posed by bodily excretions. She differentiates between two types of corporeal waste, excremental and menstrual; the former "stand for the danger to identity that comes from without" whereas the latter "stands for the danger issuing from within the identity" (71). Excrement, in this equation, evokes existential dread as an encounter with death. For Kristeva, shit symbolizes "the other side of the border, the place where I am not and which permits me to be" (3). This analysis, however, presupposes an external encounter with feces. These trips to the Interior make it possible to see shit from the inside, and thereby to "collapse...the border between inside and outside" in a manner that is very different from the Kristevan abject. For Kristeva, abjection is predicated upon the act of expulsion, of casting out unwanted matter in order to reassure the subject made vulnerable by lacking its "own and clean self" (53). In the world of the fecological body, the processes that produce excrement are depicted as the result of an intense interpenetration of the self with its surroundings. Such a view reminds us that the own and clean self that produces the abject has always been an illusion. The banks of the alimentary canal emerge as a site that hosts a communion of entities, both natural and foreign to the body, the interplay between whom intimately affects the embodied subject. When viewed from the inside, shit acts as the comforting sign of the subject's ability to function systematically in a world where the boundaries between inside and outside are increasingly permeable.

Bodily waste is the vehicle by which we arrive at this type of conclusion. In many ways, the ways that excrement interests me throughout this dissertation make it particularly well-suited to the spatializing work I've used it for here in the microcosm. I imagine the fecological body as a paradigm through which we can more easily engage the cultural narratives that dictate the

terms for bodily knowledge. This is the way shit works throughout this project; it remains an object of interest in itself, but also operates as a tool with which to ask, and complicate, compelling questions. The fecological body helps us to recognize the conditions under which texts imagine the bodily space in ecological terms. It also asks us to remain attentive to the subtle variations and outright rejections of these patterns when they are found, in order to track new manifestations of and mutations to the bodily imagination. Together with my argument in the preceding chapter, a trend is clearly emerging where, through shit, I am inviting us to think more deeply about the various spaces we inhabit and contain. In the next chapter, that trend continues by moving away from wasteways through the individual body towards the infrastructural pathways of sewers, drains, and toilets, and the paths they construct through the body politic.

This chapter began under the auspices of George Chappell's slogan, "Onward and inward!" Let me now draw things to an end with another moment from *Alimentary*. Chappell's Foreword recalls his admiration for Robert Benchley's earlier forays into the fecological genre. He states the importance of this type of writing simply: "For there is more, much more, to be done. Inside and out, we should know ourselves better" (x). In short order, he repeats himself: "Physical self-knowledge, inside and out, glorious and unashamed, that is my object" (x). This has been my object too: to show the inside as consubstantial with and inseparable from the outside, and to reiterate that our knowledge of the external plane is always already conditioned by the state of affairs in the Interior.

Chapter Three

"This passage to the Atlantic": Travels Through Sewers in Mid-Century Literature

Ishmael Reed's *The Free-Lance Pallbearers* reaches its climax clinging to the edge of a sewage outflow pipe high above the fetid waters of the Black Bay. Harry Sam, former used car salesman and dictator of the dystopian nation of HARRY SAM,⁴⁹ flees a coup orchestrated by his former devotee and narrator of the novel Bukka Doopeyduk by flushing himself down the toilet that has served as his seat of power for the past thirty years. Bukka, wise to his tricks and aware of the excremental escape route, rushes to the sewer's discharge point, hidden in the stained mouth of a statue of Rutherford B. Hayes, to prevent his escape. As Bukka reaches the outflow pipe, he finds Sam "coming out of RBH's trap on his back. . . with fingers gripp[ing] the lips holding on for dear life" (150). Despite Sam's desperate pleas to "GOAT-SHE-ATE THIS THING," Bukka begins to "stomp[] up a storm on my man's fingers" until, at last, Sam's grip fails and he plummets into the rank waters below, "sending a geyser of spray many miles high" (150-1). Bukka's victory is short-lived, however. His fleeting fantasies of absolute power in Sam's stead are quickly stifled when he is labeled a traitor and hung on meathooks on national television by Sam's designated successors.

This chapter begins where *The Free-Lance Pallbearers* ends, clinging to the edge of a sewage infrastructure to consider, to negotiate, to GOAT-SHE-ATE a transfer of power. I previously explored the fecological body in order to challenge excrement as a private matter and the body as a singular space. Now, I will trace how these new communities of shit coincide with a rethinking of communities' shit. Starting with *The Free-Lance Pallbearers* and continuing into

⁴⁹ Reed alternates his spelling of the character Harry Sam's name between all- and initial capitalization. For the sake of clarity, I use HARRY SAM to refer to the state and Harry Sam for its sovereign.

Thomas Pynchon's *Gravity's Rainbow* before culminating in Stephen King's "Rita Hayworth and Shawshank Redemption," the sewers are mythologized as a means to travel through built space much as the microbes in Chapter 2 traveled through their body-worlds, though this ability to travel microbially along the alimentary canal of infrastructure is withheld from those peoples who are, in all three texts, explicitly portrayed as bodily wastes. That is, I detail a tension between depictions of public waste. Black bodies are marginalized by an association, explicit in Pynchon and implicit in Reed and King, with shit as foul, inert matter, while the institutional authority that sustains this marginalization is inseparable from the ability to move microbially through the body politic. In addition to contesting this power disparity, Reed, Pynchon, and King voice concern with an imminent transformation to the way that the body politic handles its wastes, such that the collective body becomes closed and self-contained while the individual bodies that comprise it remain open and porous. With an attention to the specific moment in the buildup of sewage infrastructure that overlaps with the period of these three texts' publication, I show how The Free-Lance Pallbearers, Gravity's Rainbow, and "Rita Hayworth and Shawshank Redemption" eulogize the body politic that shits and express concern with a rapidly expanding social organism that seals up its gaps, crevices, and other orifices of escape.

Fouling the Bay: Ishmael Reed and the Ecological Impact of the State-as-Sewer

As Keneth Kinnamon notes in a review of Ishmael Reed's *The Free-Lance Pallbearers* upon its publication in 1967, the novel's "most pervasive unifying device is the central metaphor of shit, of which [it] is full" (18). Kinnamon is certainly not wrong. Reed's *Pallbearers* positively revels in excremental matter. Harry Sam reigns over HARRY SAM from his Great Commode, the toilet in the motel restroom where he has been sequestered for the past thirty

years with an unknown disease, wasting away and defecating regularly while solidifying his power through propaganda and corruption.

This mighty toilet serves as the symbol of Sam's authority throughout the novel. Adherents to his state religion proudly wear "great commode buttons" (10) and recite oaths professing faith that someday Harry Sam will "come out of the John and hold us in his lap" (26). The secular symbols of his reign likewise celebrate the porcelain seat of Sam's power. At the entrance to the Harry Sam Projects, home to Bukka and his new wife Fannie Mae as the novel begins, stands a statue of the despot "standing with his hands draped over two marvelous Victorian urinals" (15); similarly, the cars in Sam's official parade bear the image of "HARRY SAM the dictator and former Polish used-car salesman sitting on the great commode. In his lap sat a businessman, a Nazarene apprentice and a black slum child" (59-60). Though the people of HARRY SAM mince few words about their ruler's hygiene – "A man what's been in the baffroom fo thirty years – no tellin' what he smell like," retorts Bukka's neighbor in the projects (30) - the toilet and its connection to their own toilets via the sewage infrastructure are largely accepted as the mode of Harry Sam's power over HARRY SAM and the people living there. Sam rules with an iron fist from his commode, disseminating his authority over the people as a function of his infrastructural dominance.

Not surprisingly, the scatological foundation of Reed's critique of power in *The Free-Lance Pallbearers* has received a mixed response. Jack Byrne's treatment of the novel in the *Review of Contemporary Fiction* bemoans "Reed's overemphasis on ordure" (241) and alleges that "Reed has erred so glaringly that most reviewers see little more than a sick treatise on the alimentary canal" (240). Kinnamon's review continues scathingly, contending that the novel's "scatology...fails to convey adequately its author's moral indignation. Too facilely clever, it

entertains more than it nauseates the reader" (18). I, of course, disagree. Reed's depiction of the sewer as a mode of control is consistent with a long history of scholarship that equates waste management with the authority of the state. Specifically, *The Free-Lance Pallbearers* emerges in a narrow mid-century window of time when the technologies of human waste management and their impact were visible in a unique, if fleeting. No other period in American history saw a more concentrated investment in sewage infrastructure at the national level than the 1950s and 60s, which coincided with widespread public and ecological outcry about the limitations and failures of the system in place. That is, Reed wrote and published *The Free-Lance Pallbearers* in a moment when the presence *and* absence of sewers were equally noteworthy, which makes his fascination with human excrement and the apparatuses that circulate it is thus absolutely inseparable from the moral indignation Kinnamon seeks to defend.

The epigraph Reed chooses for *Pallbearers* provides a framework for responding to the novel's interest in excrement as a component of a larger critique of power. Reed cites Elias Canetti, specifically the chapter from *Crowds and Power* that presents the violence of consumption as a central metaphor for the operation of power. Canetti rightly surmises that no logic of ingestion and incorporation is complete without excretion, and in the section Reed highlights presents excrement as

the compressed sum of all evidence against us. It is our daily and continuing sin and as such, it stinks and cries to heaven. It is remarkable how we isolate ourselves with it. In special rooms, set aside for the purpose we get rid of it; our most private moment is when we withdraw there; we are alone only with our excrement. It is clear we are ashamed of it. It is the age-old seal of that power-process of digestion which is enacted in darkness and which, without this, would remain hidden forever. (Canetti 211)

Canetti here alludes to the power of excrement to reveal the processes of incorporation and digestion that would otherwise pass unnoticed, and it should be clear that Reed's interest lies in the same capacity of waste to illuminate the hidden byproducts of the state's "power-process of digestion."

Reed's doubling of Harry Sam as both person and place in the novel is particularly important in light of this. The difficulty of separating state from head of state is a function not only of Reed's absurdist approach but also his interest in prodding at differences between the functions of bodies and the body politic. Thus the novel begins with Bukka's narration: "I live in HARRY SAM" (1). Reed's adoption of such recognizable and blandly masculine names means that HARRY SAM is recognizable first as the name of an individual, rather than territory, though to live in, rather than with, conventionally takes a place as its object. The sentence that follows reveals that "HARRY SAM is something else" (1), neither fully person nor place, which reiterates the strange aporia these opening situating moves create.

One clear effect of this juxtaposition is that Bukka's narrative immediately resonates with a microbial voice as one of the easiest ways to resolve this tension of location. Reed encourages such readings throughout the novel, suggesting not only that he is interested in bodily metaphors for the function of the state but also that he will deploy gastroenterological and microbiological figures to enact these metaphors within the text. When, a few pages later, the anonymous "I" of the narrator takes shape and introduces himself as Bukka Doopeyduk, it is shortly followed by the revelation that he is "on [his] way to becoming the first bacteriological warfare expert of the colored race" (4), which necessarily conditions the novel's depiction of living "in" HARRY SAM with the microbial perspective.

Harry Sam finds grounds for this type of association within the text itself when he assures Bukka that "just because I've been evacuating for thirty years from the way-out bring-down illness doesn't mean that I don't know what's going on down in ME" (128). Sam's understanding of current events in HARRY SAM as a form of bodily self-knowledge reiterates Reed's pervasive interest in comparisons between bodily and built spaces as they relate to the forms power takes. ⁵⁰ As such, the novel's infrastructures of waste function pseudo-organically, maintaining order and mobility throughout the nation of HARRY SAM just as the overactive digestive tract does within Harry Sam's vulnerable, exceedingly excremental body.

And to the extent that the body's alimentary canal serves to digest consumed food, absorbing the nutritive bits and expel the remains privately, so too does Sam's control of the sewers allow him to consume endlessly, taking advantage of the black residents of the novel's slums and expelling the proof secretly into the fetid Black Bay. Reed describes the terminus of the HARRY SAM sewer system in some detail, noting that this infrastructure expels into the bay from open drains built into the mouths of four statues of Rutherford B. Hayes built into the banks of the island home of Sam's lavatory of power. As visitors to the island approach the motel where Sam has sequestered himself, they notice "[w]hite papers, busted microphones and other wastes leak[ing] from the lips of this bearded bedrock and end[ing] up in the bay fouling it so that no swimmer has ever emerged from its waters alive" (3). Reed's juxtaposition of used toilet paper alongside discarded recording equipment suggests that the corruptive power commonly

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⁵⁰ This is made especially clear in the brief window of time between Bukka deposing of Sam and Bukka himself being strung up for his role in the novel's final coup. For a fleeting moment, after Sam has plunged from into the waters of the Black Bay, Bukka can imagine himself as "DA ONE" in charge, "DA ONE SURROUNDED WITH DEM TENDENTS WHO WOULD WAIT ON ME HAND AND FOOT AND EVERYONE DIDN'T LIKE IT WOULD BE SLUGGED" (151). More to the point, in this moment, Bukka conceives of himself as "DICTATOR OF BUKKA DOOPEYDUK" (151). The immediate transposition of HARRY SAM into BUKKA DOOPEYDUK to reflect the change in leadership establishes Reed's interest in portraying the state as an extension of the ruler's body as a condition in power in general, rather than as a specific condition of Sam's rule over the country.

associated with technologies of surveillance leaks into all the "other wastes" that meet their end here so ignominiously.

Further, the fact that the polluting power of all these wastes isolates Sam's Island and maintains his state of exception indicates the power-reiterative role that Reed finds in drains and pipes throughout the novel. Giorgio Agamben's description of the sovereign in *Homo Sacer* as occupying a "zone of indistinction between law and nature, outside and inside, violence and law" that is simultaneously within and beyond the system of power is worthwhile to consider here ("Threshold"). Harry Sam's physical location on Sam's Island throughout the novel, which is topographically outside HARRY SAM but also, through the equation of the sovereign's domain with his body, within his power, makes this paradox of inside/outside palpable within the text.⁵¹ Moreover, *The Free-Lance Pallbearers* suggests that the alienating power of sewage, and the state's role in defining sewage as a category of waste,⁵² may actually help to articulate this zone of indistinction.

Reed is even more explicit in connecting these open drains to Sam's strategies of control later in the novel, when Sam grants a still-faithful Bukka an audience in his chambers. Bukka travels across the putrid Black Bay in a fortified battleship to protect him and Sam's other guests from the mutant creatures that roil the "nefarious waters" (118). Bukka overhears a conversation that attributes the bay's monstrous fauna, presumably more fearsome even than the fetid water they inhabit, to Sam's excremental excesses, as ever "[s]ince SAM went up there about thirty years ago and took up residence in the er...er...way station, the material that flushes into the

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⁵¹ Agamben's engagement with the medieval concept of the king's two bodies, as informed by Ernst Kantorowicz's text by that title, provides a clear trajectory for responding to the doubling of Harry Sam/HARRY SAM throughout the novel. Reed uses lower case to indicate the sovereign's fleshy, mortal body, whereas capitals denote that sacred body "that sees no longer to belong to the world of the living" (section 5.4).

⁵² Here I am drawing on Dominique Laporte's suggestion that "[s]urely, the State is the Sewer" (56), and that "one of the State's founding conditions is its application of the categories 'public' and 'private' to shit" (66). See *The History of Shit*, particularly Chapter 3.

bay from those huge lips has stirred even stranger forms of life. That sickness he has must be HORRIBLE" (119). The stammering substitution of "way station" for "bathroom" or any of its synonyms speaks to the taboo power of bodily waste, even within a society like HARRY SAM in which all formal power flows down excrementally from the head, or anatomical equivalent, of state. Moreover, by connecting the dangers of the Bay to the "material that flushes into the bay" due to Sam's mysterious, "HORRIBLE" sickness, Reed establishes excrement as the novel's primary object of power.

I want to emphasize this as a narrative choice with real historical stakes. In an otherwise excellent essay on the double significance of excrement in *The Free-Lance Pallbearers* as a symbol of decay and source of information, Michael Collins makes much of a veiled reference to the Hiroshima bombing in the pages immediately following Bukka's trip across the bay. Bukka lands on the island and immediately hears about a freedom fighter who was known for "carrying a pocket watch that stopped on August 6, 1945" (122). Collins uses this, the date of first nuclear bombing, to invoke the Atomic Age as "the era when humanity could destroy/devour itself" and leans heavily on this destruction-as-digestion metaphor to suggest that the fleeting "atomic allusion adds another possible meaning to the constant flow of waste matter through SAM and helps explain why the Black Bay is full of nameless monsters" (433). The Hiroshima reference Collins notes is undeniable, and he is certainly not the first and likely not the last scholar to think nuclear in response to mid-century narratives of waste.

I do, however, want to urge some resistance to the reflex that sees bodily waste and immediately looks to transmute it into some other form before taking it seriously. Reed's interest in sewers is not (just) a source of dirty jokes; it also reflects the novel's composition during the moment of American history when the ecological impact of human waste was singularly visible.

The study of infrastructure tends to be caught up in the beginning and end points on the timeline of modern waste management technologies. William Cohen, for instance, points to sewage infrastructure projects in Victorian-era London and Paris as "an important constituent in the imagination, as well as the material reality, of modernity" (xvii). Infrastructural histories are rife with dramatic references to the various Great Stinks of the late nineteenth century, and sewers' roles in alleviating those stinks, in order to show how the construction of modern waste management and disposal technologies has been absolutely essential for city centers to support a modern urban population. Contemporary investigations into today's sewers, conversely, emphasize the invisibility of infrastructure. In "The Smell of Infrastructure," Bruce Robbins champions infrastructuralism as a way of revealing unseen worlds. Robbins's essay takes its name from his evocative opening reading of viaducts and drainage creeks in Jonathan Franzen's *Strong Motion* to suggest that "[p]ublic utilities smell...because they are unattended, uncared for, unloved" (28). He goes on to describe infrastructure as "a heritage of which we are usually unconscious until it malfunctions" (32).

The odors wafting off Reed's Black Bay resemble neither the Great Stink of preinfrastructure London nor the smell of forgotten infrastructure left to decay. Rather, *The Free- Lance Pallbearers* – indeed, each of the primary texts under consideration in this chapter –
emerges in a moment when infrastructure was simultaneously highly visible and grossly
inadequate. As Jamie Benidickson describes in his impressively thorough *The Culture of Flushing: A Social and Legal History of Sewage*, urban waste management systems constructed
in the late 19th and early 20th centuries operated under the principles of accumulation and
expulsion; sewers gathered the combined effluvia of a population center and then transported it
far enough away that the population that produced the sewage would not be (obviously) affected

by dumping it into a convenient body of water.⁵³ By the middle of the 20th century, however, the limitations of this model were increasingly evident. Benidickson notes that only slightly more than half of the urban population of the United States had access to sewage treatment plants at the start of the Second World War, such that the mid-century boom in urban populations exponentially increased the amount of raw sewage pumped into American waterways with precious little in place to offset the deleterious effect these wastes would have.

Ishmael Reed stamps the end of *The Free-Lance Pallbearers* with the date and place of its completion: "*Aug. 13, 1966, HELL'S Kitchen, New York*" (155, emphases in original). Sixty days later and four hundred miles west, in an address at Gannon College in Erie, Pennsylvania, Vice President Hubert Humphrey bemoaned the degree to which "our affluent society has also been an effluent society" and the effect this effluence was having on the nation's natural resources, specifically the Great Lakes:

These magnificent inland seas contain a third of all the fresh water on the world's surface.

They are an asset of incalculable value to the nation. We have carelessly treated them as inexhaustible – and now we are finding they are not. By using them as a dumping ground for all the wastes that our civilization produces, we have done grave damage to them.

(Humphrey)⁵⁴

Humphrey's comments were far from the first or most strident in denouncing the effect of sewer systems that were open to the nation's rivers, lakes, and oceans. A report by the US Public Health Service in May 1951 had prescribed the construction or expansion of 6,600 municipal

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⁵⁴ I am indebted to Jamie Benidickson's citation of the "effluent society" line for bringing this speech to my attention.

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⁵³ Benidickson's reference to "Flushing" in his title is meant to indicate his interest in the long history of flowing water as a mechanism for the transportation and dispersal of wastes. His is ultimately an argument about the fair use of communal water supplies, and the ways that the politics of waste management have long skewed access to shared waterways in far-reaching, if underexamined, ways.

waste treatment facilities to reduce the impact of this rampant water pollution (Benidickson 285), and while the actual degree of infrastructure expansion fell well, if predictably, short of this number, the years between the Public Health Service report and *The Free-Lance Pallbearers* did see a marked expansion in new sewage treatment projects and attention to the effects of their absence.

A report on the *Cost to the Consumer for Collection and Treatment of Wastewater* published by the EPA in 1970 begins, with significant understatement, by noting that "[o]ver the past year or two in the United States, concern over deterioration of the environment has grown significantly" (5). The same report provides a summary of wastewater collection and treatment in the United States for the period from 1957 to 1968, during which time the country's "Total Sewered Population" rose from 98 million to 140 million (60). Over the same period, the population discharging raw, untreated sewage directly into the waterways dropped from nearly 22 million to 9.5 million. While a significant improvement, to be sure, this means that more than 11% of the American population's waste was discharged with no or minimal treatment two years after Reed published *Pallbearers* (11). I mean here to suggest simply that we read *The Free-Lance Pallbearers* as occupying a specific niche in time when the discharge of waste *and* the construction of treatment methods were simultaneously and intensely visible.

In light of this, reframing Reed's depiction of ecological collapse in the Black Bay originating in Harry Sam's excessive sewage as a veiled reference to nuclear fear underestimates the degree to which outflows and their impact were a source of anxiety as well. The relationship of infrastructure to control was never so visible as during this window of time when the scarcity of waste treatment plants recorded the effects of nation-building as literal stains on the

landscape. Reed takes up this moment of grotesque openness to the sea to stage his satire of life within the body politic in digestive, excremental terms.

Reed shows how the one-way discharge of excrement to an indistinct, excluded outside serves the powers that be. Bukka, in his second day of public torture, learns that Sam's escape through the sewers was less extemporaneous than he had initially assumed. Sam, he is told, "thought that if things ever got hot, he'd have to take it on the lam. Like if GOAT-SHE-ATE-SHUNS failed or something. So he had the Counter Insurgency Foundation invent this formula what would work if he ever had to swim the Black Bay" (153-4). Pre-planning his path through the sewers casts Sam's escape as an exercise of power rather than act of desperation. It is only Bukka's willingness to meet Sam at the excremental opening of the bowels of his power that disrupts the sewer's support of the sovereign.

Of course, ending the novel with Bukka hanging on meathooks makes it difficult to read optimism or renewed calls for political agency into *The Free-Lance Pallbearers*. If anything, the most damning insinuation of Reed's critique comes in the realization that sealing the orifices of the body of power does little to benefit the people that dwell in its guts. A body politic that expels its waste from designated orifices that, though hidden, create foul odors and damning stains is one that, simply put, shits like the rest of us, and its replacement with a body whose wastes circulate endlessly in secret renders its excesses that much harder to track. As Michael Collins notes,

In *Pallbearers* excrement is the last stage in the destruction of a life-form and of whatever messages – symbolic or genetic – the life-form might have sent if it had lived. Excrement represents the destruction of information and self-knowledge (Canetti's "bloodguilt"). Yet excrement is full of information about what has been devoured and

what has done the devouring and is therefore in *Pallbearers* also a metaphor for the underground communication of truths (and sometimes the unconscious reception of them) in a world where only falsehoods smell good. (424)

In the first place, Collins' interest in the genetic information excrement contains echoes the call I made earlier for a scatological perspective that recognizes the inside of shit. More to the point, however, is the way that Collins' elaboration of excrement as a vehicle for truth suggests that the additional technological buildup to hide its impact might also obscure the processes of consumption and digestion upon which power, following Canetti's argument in *Crowds and Power*, is built.

It is telling that Harry Sam falls from power only when Bukka Doopeyduk uncovers material proof of the tyrant's violent misuse of his subjects. Bukka's boat tour of the Black Bay launches from the slums of Soulsville, where he notes "the oratory of live ghosts protesting the mystery of the missing children" (118), an ongoing, if subtle, indication of the erasure of black bodies throughout the novel. It is only when Bukka arrives on Sam's Island and is able to explore the labyrinthine motel that he discovers these rumors of disappearances are in fact true.

Searching for an exit, Bukka opens a door marked "Classified" only to be stunned when "[h]undreds of tiny skulls poured out and knocked [him] off [his] feet" (139). Sam, it turns out, has turned to a macabre treatment for the horrible disease that confines him to the bathroom, and as soon as Bukka returns to the mainland he makes an announcement: "LADIES AND GENTLEMEN, SAM'S EATING YOUR CHILDREN" (144).

The revelation of Sam's cannibalism, though startling, is hardly unexpected given the depiction of systemic oppression in terms of ingestion and digestion that Reed develops throughout the novel, starting from the epigraph. Bukka's discovery of the horrific stock of

children's skulls recolors an earlier moment in the novel, when the first mutant creature to emerge from the Black Bay was found "to be full of old Manhattan telephone numbers and skulls" (119). When this detail is first provided, the insinuation is that this monstrous bird has been feasting on bay-area fisherman, but the subsequent discovery of Sam's secret tastes makes it clear that his monsters scavenge from the discarded remnants of his human meals. Thus, the first sign of Sam's violence against the inhabitants of his body-state feeds itself on the material traces his sewers expel into the bay. This is a mode of accountability that Reed portrays on the wane as the body-politic starts to handle its wastes in a closed loop. Harry Sam's power over HARRY SAM is only disrupted because the body of the state still handles its wastes in the same manner as its populace. By opening the novel with Canetti's description of excrement as the "age-old seal of that power-process of digestion" that would otherwise "remain hidden forever," Reed expresses fear for the historical moment in which the material signs of power's excesses are rapidly becoming invisible.

The stagnating effect that this transformation of the body politic into an organism that attempts to handle its wastes internally – that does not shit, so to speak – has within the world of HARRY SAM becomes clear in the closing pages of the novel, when the Free-Lance Pallbearers, the mysterious cadre prophesied to appear and "take SAM" out of power (4), at last appear, "Better late den never" (155). Though Bukka can tell they have come to cut him down, he realizes that "they couldn't get through" due to "this great ball of manure suspended above Klang-a-Lang-a-Ding-Dong. Held down by spikes and rope it stank to high heaven" (155). This image of the immobile ball of waste, accumulated slowly over the course of the novel by Bukka's former mentor, thwarting the efforts of the titular revolutionaries, expresses Reed's concern for political action within a body through which all flows, even excrement, are halted.

Thus *The Free-Lance Pallbearers* fades out on the neon lights of the new regime, blinking out the insidious message of a totalizing system of control: "EATS-SAVE GREEN STAMPS-BINGO-WED-EATS-SAVE GREEN STAMPS-BINGO-WED-EATS-SAVE GREEN STAMPS-BINGO-WED-EATS-SAVE" (155). With Harry Sam deposed, his successors take up in his stead able, as their sign proclaims, to EAT and SAVE endlessly without producing any visible signs of vulnerability in waste.

It is worth pausing here to reflect, briefly, on the way that this reading of the sewers in The Free-Lance Pallbearers offers a needed response to the trend among works of infrastructuralism in which literary depictions of these technologies of modern life are presumed to suggest an action plan for public works and civic duty. In their introduction to infrastructuralism in the special issue of *Modern Fiction Studies* devoted to the subject, Michael Rubenstein, Bruce Robbins, and Sophia Beal attempt to weigh "the proper amount of skepticism with which to consider the infrastructures that shape our lives" by balancing the "intrusions of infrastructure" against "the progress it does, sometimes, represent" (579-80). The narrative importance of the open sewers as a necessary site for the audit of power in HARRY SAM reflects the quandary that this type of balancing act represents. To read Reed as bemoaning the ecological benefits of sewage treatment construction projects is simply untenable. Rather, *The* Free-Lance Pallbearers sounds a poignant, if subtle, alarm about the momentum this type of buildup creates. Reed's interest is not in depicting the realistic operation of sewage systems or the repercussions of their disrepair, but rather in expressing concern over the subtle ways that the neoliberal system that generates so much waste further solidifies its totalizing power in the way it responds to the crises of its own creation. The lingering impact of *Pallbearers*, then, comes not from the suggestion that things would be better if sewers remained open to the sea, but simply in

pointing out the ways that sealing these orifices produces a closed body politic that no longer resembles the humans that comprise it. To borrow Rubenstein, Robbins, and Beal's turn of phrase, then, the proper amount of skepticism with which to approach the sewers requires a heady sense of disgust with unfettered outflow while also remaining endlessly suspicious of the expectation that expanding a state-sponsored control mechanism will alleviate social disparities that originate in the state.

"That's what that white toilet's for": Racing Through Pynchon's Underworld

Published in 1973, *Gravity's Rainbow* first appears during the high point of the second American sewer boom. Like *The Free-Lance Pallbearers*, Thomas Pynchon's sprawling narrative includes a pivotal scene in which a fearful white character flees a black character by flushing himself down the toilet. During a drug-induced flashback, Tyrone Slothrop recalls dropping his harmonica into the toilet of the Roseland Ballroom and, fearing rape at the hands of the black restroom attendant, squeezes himself into the pipes after it. From the sewers, Slothrop finds

he can identify certain traces of shit as belonging to this or that Harvard fellow of his acquaintances. Some of it too of course must be Negro shit, but that all looks alike. Hey, here's that "Gobbler" Biddle, must've been the night we all ate chop suey at Fu's Folly in Cambridge cause there's bean sprouts around here some place and even a hint of that wild plum sauce...say, certain senses then *do* seem to grow sharper...wow...Fu's Folly, weepers, that was months ago. (75)

Continuing further into the sewer, Slothrop comes across the traces of another acquaintance:

A-and here's Dumpster Villard, he was constipated that night, wasn't he – it's black shit mean as resin that will someday clarify forever to dark amber. In its blunt, reluctant touches along the wall (which speak the reverse of its own cohesion) he can, uncannily shit-sensitized now, read old agonies inside poor Dumpster, who'd tried suicide last semester. (75)

It is worth pausing here, however briefly, to comment that, in some ways, Slothrop's shit sensitization looks quite like the methodology I have advocated for throughout this dissertation. Slothrop's recognition of the old suicidal agonies haunting his friend Dumpster Villard in his fossilized black stool echoes my own interest in the ways that shit emerges as a diagnostic tool for bodily and mental health in the 20th century.

Something else draws me to Pynchon, though: namely, the simmering racial tension he locates in the pipes. The location of Slothrop's entry to the sewers is absolutely vital. By initiating this scene in the Roseland Ballroom, Pynchon recalls Malcolm X's reflection on the segregation of cultural life along racial lines from his experiences in this same bathroom. This intertextual connection of *Gravity's Rainbow* to *The Autobiography of Malcolm X*, highlighted by the appearance of "Red Malcolm the Unthinkable Nihilist" as the men's room attendant (Pynchon 74), has been noted casually by a number of scholars, 55 but it is worth drawing out in greater detail in order to situate Slothrop's insistence that "Negro shit...all looks alike" within a history of infrastructural policy that associates black communities with waste while also excluding those same communities from proper waste management facilities.

⁵⁵ Anahita Rouyan notes that this scene "explicitly alludes to the content of Malcolm X's *The Autobiography*" in order to address "the problem of social oppression" (127). David Witzling similarly makes hay of this "famous sequence...between Slothrop and a young Malcolm X" to comment on "the impossibility of winning that battle" against racism in the white community (36), whereas Douglas Keesey celebrates Pynchon's portrayal of Malcolm X within the novel "to show how the very weapon by which self and other will be destroyed has that within it which, if recognized, could save them both" (100).

Malcolm X first names the Roseland Ballroom as he describes his arrival in Harlem. His amazement at the city's thriving nightlife centers on the "biggest bands [that] played at the Roseland State Ballroom, on Boston's Massachusetts Avenue – one night for Negroes, the next night for whites" (42). The Ballroom is a deeply divided space, where "[m]ost dances...were for whites only, and they had white bands only" (58), and much of *The Autobiography*'s engagement with the Roseland Ballroom comes from its reflection on differences between the black and white clubgoers' habits and preferences as recalled from his post in the lavatory. He ultimately finds work at the "huge, exciting Roseland State Ballroom" (50), shining shoes in the men's restroom, though the position entails much more than a rag and polish. He sells liquor and condoms and learns to earn extra tips by "sham[ing]" those "who ain't planning to wash their hands" (56).

These same details appear in Pynchon's depiction of the Roseland Ballroom in *Gravity's Rainbow*. Slothrop recalls "all the Harvard fellas" availing themselves of Red's peripheral services, purchasing Sheik brand condoms and requesting "another luck-changin' phone number" from "the very tall, skinny, extravagantly conked redhead Negro shoeshine boy" (74). Pynchon's mention of Red's conked hairstyle codes this passage as an explicit reference to *The Autobiography of Malcolm X*, as the latter famously decries being "brainwashed into believing that the black people are 'inferior' – and white people 'superior' – [to the degree] that they will even violate and mutilate their God-created bodies to try to look 'pretty' by white standards" (64). Malcolm X intersperses his strident condemnation of chemical straightening between anecdotes from the Roseland Ballroom's bathroom, which positions Pynchon's depiction of the same space as a hyperbolic reimagining of these same standards from the perspective of Slothrop and his white Harvard chums.

In a similar way, the bathrooms in both Roseland Ballrooms share the same soundtrack. *The Autobiography* reflects how the sonic space of the club tends to divide along racial lines, noting that Charlie Barnet and his orchestra were the "only white band ever to play there at a Negro dance," and they "drove those Negroes wild" by playing "Cherokee" and "Redskin Rhumba" (58). Pynchon foregrounds the entanglement of his Roseland bathroom with Malcolm's by letting the "sounds of 'Cherokee'...play[Slothrop] out to the sea" as he wanders the sewers evading Red and looking for his harmonica (75). The specific in-text mention of "Cherokee" merits special attention, given the importance that has been placed on the musicality of Pynchon's fiction in general and *Gravity's Rainbow* in particular. ⁵⁶ Slothrop's dismissal of the song as "one more lie about white crimes" reiterates Pynchon's interest in reimagining Malcolm X's formative experiences from the perspective of the recalcitrant whites whose shoes he cleaned (73); it also makes the Barnet tune stand out among the seventy songs Anahita Rouyan counts in the novel as the one tune that drives narrative attention away, in this case down into the sewers.

Kathryn Hume and Thomas Knight have been careful to articulate the role that Pynchon's music and sewers play in establishing the novel's Orphic subtexts. In "Orpheus and the Orphic Voice in *Gravity's Rainbow*," they note that the "Roseland band playing 'Cherokee'[...] hints at death to come" before describing the sewers Slothrop wanders as an "excremental hell" from which Slothrop never emerges (301-2). In "Pynchon's Orchestration of *Gravity's Rainbow*," they cite the soundscape of the Roseland bathroom as an example of music's function "to help us

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⁵⁶ For examples of the former, see William Vesterman's "Pynchon's Poetry" (1975), Charles Clerc's *Mason & Dixon & Pynchon* (2000), and Maureen Quilligan's "Twentieth-Century American Allegory" (2003); for the latter, in addition to the sources cited shortly, see J.O. Tate's "*Gravity's Rainbow*: The Original Soundtrack" (1983) and Thomas Schaub's "Atonalism, Nietzsche, and *Gravity's Rainbow*: Pynchon's Use of German Music and Culture" (2008).

move upstream against the flow of time, a prophetic function" (376).⁵⁷ These interpretations of Slothrop's exodus through the toilet privilege the mythological reading of the sewers-as-underworld in ways that overlook Pynchon's clear interest in and efforts to ground *Gravity's Rainbow* in the nitty-gritty of the world beneath the Roseland Ballroom.

Hume and Knight's interest in music as a mechanism for moving against the historical current overlooks Slothrop's explicit progress downstream to the sounds of "Cherokee." In this case, the prophetic function of music to reveal an alternate future is flushed away by the sewer's constraining, reiterative power. Following Malcolm X's bathroom into the sewers allows

Pynchon to explore the ways that the infrastructure of waste reflects and contributes to the racial and societal disparities highlighted in *The Autobiography*. Patrick Jagoda connects Slothrop's flight from Red to "a cultural anxiety about the structural vulnerability of American power that was widespread by the late 1960s and early 1970s when Pynchon composed the novel" (331), and I want to emphasize Pynchon's depiction of the infrastructural reaction to this structural vulnerability. In such a light, Slothrop's panicked flight from Red resonates as an indictment of infrastructural imbalance, in which a newly vulnerable white population shores itself up against challenges with the reassurance of material power that the underworld of waste infrastructure connotes.

As in the previous section, Pynchon's repeated references to the open end of his sewers underscore the visibility of infrastructural buildup in the midcentury period when *Gravity's Rainbow* was composed. As Slothrop wanders "this passage to the Atlantic, odors of salt, weed, decay washing to him faintly like the sound of breakers" (75). The sounds and scents of the sea

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⁵⁷ This is the third of Hume and Knight's functions of music in Pynchon's literature. The first is musical allusion's ability to position characters within an everyday reality, and the second provides "glimpses of less mundane, alternative realities" (367).

intermingle with the dank smells of the infrastructure that empties into it. Like this mixture of seawater and sewage, Pynchon blends the mythological and material in his depiction of the sewer in order to explore how the 1960s' and 70s' preoccupation with the terminus of the waste infrastructure bubbles into sight. In their detailed analysis of the orphic resonances of *Gravity's* Rainbow, Hume and Knight have done well articulating Pynchon's investment in the Greek tradition to sound a warning against impending doom. I want to make sure that we see Pynchon's interest in the physical reality of the sewerscape as a second strand in this knot, however. The pipes Slothrop wanders are rendered in notably concrete and realistic language, as when he remarks on the "elaborate[] crust[]" of shit "along the sides of ceramic (or by now, iron) tunnel he's in" (74). That subtle progression from the ceramic pipes of building-to-building and building-to-main connections into the sturdier ironworks of the main flow of sewage reflects the slow evolution of waste management materials and represents Slothrop's journey backward in time as he moves downstream. As Maureen Ogle reports in All the Modern Conveniences, iron pipes were most commonly used in early sewage systems for the conveyance of solid wastes due to their strength compared to lead (84). However, since metal pipes were also prone to corrosion and leaking, several waves of sanitarian reform led to their gradual replacement with earthenware and ceramic pipes (Benidickson 92). Slothrop's search for his harmonica, then, traces the infrastructural buildup of the city backward to its earlier, leakier origins. The specificity and historical accuracy in this moment in the Pynchon makes it difficult to read the excremental location of this episode as mere parody of the Orpheus myth; rather, it is important to see Pynchon here reflecting on the material reality of the world beneath the city in a state of flux.

My words here are carefully chosen to evoke the title of Robert Daley's 1959 history of the subterranean network of waste, water, electrical, and subway connections beneath New York City. Daley's *The World Beneath the City* is best remembered for its breathless history of sewer cartography, an urban discipline he portrays as unique to the city and pioneered by Teddy May, the New York Superintendent of Sewers from 1925 to 1954. In particular, Daley's reporting of May's tales of alligators living in the sewers after being flushed down the toilet is widely credited for the propagation of that myth, which Pynchon took up as a major plot point in his debut novel *V*.58 In much the same way that *Gravity's Rainbow* blends the mythic underworld of Greek myth with the material underworld beneath the Roseland, Pynchon's earlier novel draws heavily on urban legend to follow the Whole Sick Crew into the sewers to hunt albino alligators. As a result, the mythic interweaves with the mundane in order to invoke a power structure that simultaneously stretches the imagination while remaining credible.

This momentary diversion into V. is meant simply to illustrate Pynchon's interest, spanning several texts, in bathrooms and sewers as entry points to a plane of monstrous white power.⁵⁹ Though the racial character of infrastructural power is strongly implied during Slothrop's first foray into the sewers, Pynchon makes it explicit when he returns to the Roseland Ballroom in the "Shit 'n' Shinola" portion of "The Counterforce," the final section of Gravity's Rainbow. Here, Pig Bodine reappears from V. to reflect on "the place Slothrop departed from on his trip down the toilet" (802). Bodine is the first to relate Slothrop's self-flushing to a systemic fear:

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⁵⁸ A.G. Sulzberger's piece on the alligator myth for *The New York Times*' "City Room" blog notes that defenders of the urban legend "lean[] heavily on a widely cited three-page section of the book." I am indebted to Sulzberger for directing me toward Daley's text, as well as for making explicit the connection back to *V*.

⁵⁹ It is worth noting here that the W.A.S.T.E. plot at the center of *The Crying of Lot 49* begins with graffiti found on the wall of a bar bathroom, meaning that Pynchon's first three novels all explore the imbrication of waste infrastructure with networks of control.

Shit, now, is the color white folks are afraid of. Shit is the presence of death, not some abstract-arty character with a scythe but the stiff and rotting corpse itself inside the whiteman's warm and private own *asshole*, which is getting pretty intimate. That's what that white toilet's for. You see many brown toilets? Nope, toilet's the color of gravestones, classical columns of mausoleums, that white porcelain's the very emblem of Odorless and Official Death. (802)

In this, Pynchon presents the toilet, and by extension the network of pipes that connect it to the sea, as a tool of white power. Specifically, by equating the symbolism of the toilet with gravestones and mausoleums, Pynchon pits the infrastructural power of solidity and stagnation against the vibrant powers of mobility that excrement would otherwise imply. Slothrop's paranoid turn away from "Red" Malcolm and toward the toilet thus operates as a freezing gesture; the white porcelain of the toilet traps the black bodies of the bathroom attendant and his friends and reserves for Slothrop the privilege of escape. Thus, as Pynchon notes, the waste lines that crisscross the underworld spell death for the city's black inhabitants, and in doing so reserve mobility as a function of whiteness that is activated by the porcelain toilet's resemblance of the skin tone of the privileged upper class that it is "for."

Pynchon's blending of Malcolm X's autobiographical recollection of these waste spaces with references to the material reality of mid-century sewer systems allows this condemnation of the racial politics of the sewer to resonate in two registers. First, Slothrop's inability to read the traces of black excrement he comes across in the sewers – the insistence that "Negro shit...all looks alike" with which this section began – does emerge, in this light, as representative of real, material disparities in access to waste management at the level of communities. Slothrop's blindness to black excrement in the pipes below the Roseland Ballroom reiterates that the space

he travels through heavily favors the movements, bowel or otherwise, of the likes of "Gobbler" Biddle and Dumpster Villard, Slothrop's white Harvard chums. By remaining attentive to the textual features that mark Gravity's Rainbow as having been composed and taking place within the window of mid-century infrastructural flux, we can further see how the enforced whiteness of these excremental spaces reflects the historical imbalance between access and impact that skews heavily in favor of white communities. Martin Melosi's magisterial *The Sanitary City:* Environmental Services in Urban American from Colonial Times to the Present confirms that the post-war construction of new sewerage systems disproportionately benefited growing suburban communities and their notably homogenous white population. ⁶⁰ At the same time, the environmental impact of sewage systems new and old proved most detrimental to the very same populations who were least serviced by them. Outdated and insufficient waste management systems were less maintained and thus failed far more frequently within communities of color, and the addition outflow of new sewer hookups to suburban white communities often exacerbated the issue. Melosi notes that the "connection of existing water and sewer systems – or the construction of new ones – in suburban areas contributed to further metropolitan decentralization [of waste management services], while not necessarily improving the equality of existing systems" (193). "Confidence in the sewer systems' functioning and permanence," he further notes, "was shaken by overloading and deterioriation" (194). The resulting overflow problems of these overtaxed sewer systems "often occurred in places where the land was used for industrial purposes and where discharges primarily emptied into streams" (195), both of which describe locations that skew away from the rich, predominately white communities that produce the troublesome waste in the first place.

⁶⁰ See Melosi, Chapter 14 in particular.

Pairing these community-level concerns for the disparate impact of sewer access with the anecdotal details adopted from *The Autobiography of Malcolm X* suggests a continuity between these long-term infrastructural disparities and the day-to-day experience of racialized injustice. Pynchon treats the Roseland Ballroom as both cause and effect of Malcolm's discontent within the novel and, by implication, *The Autobiography* as well. The omnipresence of waste infrastructure perpetuates a status quo that reserves privileged mobility for Slothrop and stasis for those who might render him vulnerable. This dynamic is predicated upon a distinction between forms of excrement that reflects the increasingly complex understanding of shit to which this dissertation responds. Pig Bodine equates Malcolm's black skin with both shit and shoe polish, referring to the latter's "sin of being born the color of Shit 'n' Shinola" (802) and thereby applying an association between shit and death to justify the exclusion and stagnation of black bodies within the communities the novel depicts. At the same time, to enter the sewer requires Slothrop to acknowledge himself flushable, and thereby align himself with the same traces of shit he finds as he wanders. Such an action, I argue, must be activated by the new epistemologies of shit that are attuned to its microbial liveliness and inherent activity, which suggests one way that thinking of excrement as a site of collectivity leaks into other issues of collective wastes. More importantly, given this dissertation's emphasis on the ways that these forms of excremental thinking empower new forms of collective action across scales, it is important to decry the imbalance of access to these newly mobile associations of shit, given that the power to travel as the microbes do through the sewers is routinely deployed to insulate white bodies from other co-inhabitants of the body politic.⁶¹

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⁶¹ Again, this resonates with the history of sewer construction. Werner Troesken's analysis of historical expansions to water and sewer access in black and white neighborhoods shows that, historically, black neighborhoods receive water and sewerage services five to ten years after white neighborhoods, and that the increased racial segregation in

Crucially, the openness that Pynchon insists upon in his depiction of the sewers represents an inherent limitation to the waste infrastructure's isolating power. In a manner similar to Reed, whose novel ended with the reification of entrenched power by sealing up apertures, Slothrop's journey through the sewers likewise ends with a vision of a potential future he finds deep within the archaic iron pipes he wanders, in which the sewer is lit by neither sun nor moon. This ominous future is precipitated by a massive rush of excrement, "this godawful surge from up the line, noise growing like a tidal wave, a jam-packed wavefront of shit, vomit, toilet paper and dingleberries in mind-boggling mosaic" that sweeps up Slothrop and sends him "tumbling ass over teakettle" down the line (76). When at last the "murky shitstorm" calms, Slothrop finds himself among ruins, in "a place of sheltering from disaster" (77). Hume and Knight's insistence that Slothrop "never really emerges" from Pynchon's excremental underworld locates this sheltered plane within the sewers themselves ("Orpheus" 302), and the discovery that "contacts' are living in these waste regions. People he knows" (Pynchon 77) further indicates that Slothrop finds himself in a place of sheltered whiteness, insulated from incursions - military, racial, and otherwise - against his privilege.

It is key, however, that Slothrop rejects any possibility of communion with the contacts he finds in the sheltered wasteland of the sewer. As he "stands outside all the communal rooms and spaces," feeling "only his isolation" (77), he is called to join the pale cloister he finds deep in the sewers beneath the city. And yet: "They want him inside there but he can't join them. Something prevents him: once inside, it would be like taking some kind of blood oath. They would never release him. There are no guarantees he might not be asked to do something... something so…" (77). The narration trails off here in a way that mirrors Reed's use of

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northern cities "made it easier for local politicians to deny service to blacks" since "those neighborhoods could have been denied service without unduly affecting whites" (769).

stammering substitution to avoid fully naming the excremental horrors that imbue the sewers with their power. By turning away from the siren call of the sewer, Slothrop models a form of resistance, or at least acknowledges a limit, to the infrastructural inequality that insulates his body from precarity at the expense of the others it flushes away. His fear of never being released from such a shelter indicates a substantive shift away from the open sewer that adds an element of horror to the closed system that Pynchon rails against throughout his fiction, and which I am finding throughout this chapter in the form of growing apparatus of waste management. Even as Slothrop takes advantage of the mobility the sewer grants him at Red's expense, he evinces an awareness of the ominous implications such power implies; by seeking a return to the sewer that remains open to the sea, Slothrop insists on an alternate form of the built space: one with designated openings and limitations, apertures from which to expel waste and escape to something new. As I will show in the following, final section, this turn to the sewer as a form of escape is shared across texts in this chapter. I turn now from Gravity's Rainbow to "Rita Hayworth and Shawshank Redemption" with Pynchon's opposition between the forms the excremental underworld might take in mind, in order to explore how Stephen King stages movement through the sewer might empower a critique of the stagnating, isolating power from which the plane of white material power – Pynchon's place of sheltering from disaster, King's prison – takes shape.

"Oh shit it's shit": Stephen King's Competing Infrastructures

Infrastructure is more than "just irrigation and sewage and electricity," as Rubenstein, Robbins, and Beal remind us. "Prisons are a kind of infrastructure, too" (579). Distinguishing between kinds of infrastructure is a way of attuning a critical eye to the paradoxes inherent to the

subject. On the one hand, as they put it simply, "[i]mprovements to infrastructure are desirable" (579); on the other, they remain attentive to the tendency of infrastructure to act "not as a form of social provision but rather as a form of what Elleke Boehmer and Dominic Davies call 'planned violence'" (580). Indeed, as Rubenstein, Robbins, and Beal argue, recognizing differences between kinds of infrastructure other than the prison forms much of the impetus for the recent scholarly return to the subject, which "for the last 40 years has opposed itself" to infrastructure as read through Michel Foucault's reading of the panopticon. The challenge of this type of study, as I have outlined here, is in acknowledging the clear benefits and material comforts infrastructure can convey without overlooking the violence done in its name.

These contradictions are fully evident in the New England prison from which Stephen King's "Rita Hayworth and Shawshank Redemption" draws its name. Here, the comparison between prison walls and the outflow pipes they conceal makes it most possible to imagine the sewer as simultaneously wrapped up in and opposed to the politics of control and stasis. By mythologizing Andy Dufresne's tenure in prison and ultimate escape through the sewage pipes that connect his cell block to the outside world, King renders wasted bodies newly visible and suggests that the sewer's connection to bodily flows thwarts some of the effect of other built networks of power. At the same time, however, the scent of Pynchon's sewer as a plane of the white escape fantasy lingers on King's depiction of Andy's means of escape. Thus, while "Rita Hayworth" challenges elements of the imposing stasis of planned violence, the benefits of King's sewers nevertheless accrue to benefit the prisoner who entered Shawshank with the greatest economic and racial privilege already in hand.

Like all prisons, King's Shawshank serves as a wasteland and dumping ground for people expelled from the social order. The prisoners' reference to Shawshank as the "shithouse" (39) is

particularly apt, for to enter those walls is to be marked indelibly as excrement, befitting the prison's status as a repository for human waste - what Zygmunt Bauman describes as "wasted humans." King makes the identification of the imprisoned with waste explicit throughout his novella by firmly establishing the scatological foundations of the community within Shawshank. Andy Dufresne's reputation as a "snob and a cold fish" is formulated as being at odds with the excremental odor that he, as an inmate as Shawshank Prison, must have (16). Red's first interaction with Andy is informed by prison-yard scuttlebutt that "people were already saying [Andy] thought his shit smelled sweeter than the ordinary" (16).

King is consistent in portraying his prison guards' authority as a kind of waste management; that is, command over the guts and their products is shown to be the signature trait of the prison's infrastructure of power. The draconian guard Stammas is known as "a short man with a tight, hard gut" and "a painful, pursed little grin on his face, as if he had to go to the bathroom and couldn't quite manage it" (31). It stands out that Stammas, a figurehead for the mechanisms of violence that uphold the prison structure within the novella, comports himself as though his guts are unmovable. His hard gut, immune to the machinations of anyone but himself, twists his face into a constipated approximation of agony and authority. His fellow guards wear similar masks, going to such lengths that any expression of power voiced within Shawshank must take this form of scatological control, even when describing a relationship that lives beyond the prison's walls. Hotblooded Byron Hadley assures Andy that his control of his wife is so complete that "if she ate her way through a boxcar of Ex-Lax, she wouldn't dare fart unless [he] gave her the nod" (37). Hadley expresses excremental authority of the prison as a form of

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⁶² Bauman's *Wasted Lives: Modernity and Its Outcasts* shines a light on marginalized populations who "either could not or were not wished to be recognized or allowed to stay" (5). Bauman argues that the identification of such "human waste" is "an inevitable outcome of modernization and an inseparable accompaniment of modernity" (5), which speaks to the circular logic and latent threat of infrastructure as a foundation of modern life.

knowledge as well, declaring that he "[doesn't] need any smart wife-killing banker to show [him] where the bear shit in the buckwheat" (36). Since Foucault, power, particularly the power of prisons, resides in the imposition of "natural" bodily activities and the regulation of those activities over time, and the manifestation of penal authority within Shawshank as dictating the proper times, places, and manner for the appearance of waste is consistent with Foucault's comments on the creation of docile bodies through the modern penal system.⁶³

Red's eventual explanation of "how it is to be an institutional man" reiterates the way that incarceration rewrites the bowels as a term of confinement. He focuses extensively on the way that prison life regimented his bowels:

If you're at work in the laundry or the plate-shop, you're assigned five minutes of each hour when you can go to the bathroom. For thirty-five years, my time was twenty-five minutes after the hour, and after thirty-five years, that's the only time I ever felt the need to take a piss or have a crap: twenty-five minutes past the hour. And if for some reason I couldn't go, the need would pass at thirty after, and come back at twenty-five past the next hour. (92)

King's interweaving of two timeframes within this description – the passing of minutes within the hour and the passing of years within the prison – reflects the way that prolonged prison sentences inscribe themselves on the bodies of the imprisoned, to the point that a missed bathroom break means that the bodily need of excretion "pass[es]" and "come[s] back" rather than being ignored or deferred until the next opportunity. The subtle repetition of "after" here, with Red's institutionalization accomplished only "after thirty-five years" and the passing of the

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⁶³ In *Discipline and Punish*, Foucault lists four great techniques of discipline upon the body: "it draws up tables; it prescribes movements; it imposes exercises; lastly, in order to obtain the combination of forces, it arranges 'tactics'" (167).

pressure to urinate or defecate "at thirty after," emphasizes the monotony of daily regimentation within Shawshank, such that the ticking of minutes in the laundry gives way to the passage of years. Red's experience also suggests that the prison's power over him accumulates slowly in the guts with force enough to rewrite bodily need as a function of permitted access.⁶⁴

Andy's eventual escape thwarts the prison's violent power of stasis by diving, quite literally, into the sewage outflow pipes he tunnels into through his cell wall. Red's description of the scene the morning following the escape underscores the opposition between prison and sewer and their competing forces of stagnation and flow. The prison guards, having at last discovered the tunnel hidden behind a pinup of Linda Ronstadt, gather in his cell to determine where Andy might have gone; they are, in this case, still operating within the spatial understanding of the prison as a dumping ground, in which materials, once dumped, can be relocated but never lost. Despite standing in the very spot from which Andy made his escape, they consult a set of prison blueprints, the ur-symbol of power in the form of strict, unchanging delineations of space, and Red, though confined to his own cell,

knew well enough what they showed him – a wall which looked, in cross-section, like a sandwich. The entire wall was ten feet thick. The inner and outer sections were each about four feet thick. In the center was two feet of pipe-space, and you want to believe that was the meat of the thing...in more ways than one. (81)

Those two feet of pipe-space unsettle the illusion of Shawshank as a monolithic edifice of power. Red's diversion into the second person in describing them, noting that "you want to believe that

indistinguishable from bowel movements.

⁶⁴ King's description of the Solitary Wing reiterates this association between the time spent incarcerated and the time spent on the toilet. Prisoners in solitary confinement "had three ways to spend [their] time: sitting, shitting, or sleeping" (60). Red's follow-up quip that this all amounts to a "Big choice" suggests the opposite: that in the heart of Shawshank, in the space most concentrated with the power of the prison to define time and codify bodies, the distinction between waking, sleeping, and defecating is punctured, such that thoughts and dreams become

was the meat of the thing," contrasts with the impersonal tone he adopts for the prison blueprints and their strict measurements of power by inches of concrete. Referring to the sewage pipe as the "meat of the thing" further ruptures the space. The juxtaposition of the waste outflow with food metaphors and the language of ingestion elicits a powerful, if momentary, reaction of disgust that is roughly commensurate with the guards' realization of a sudden limit to their previously infinite mechanism of control. Red's use of ellipsis, the loaded pause culminating in his direct reminder that the entendre here is indeed double, revels in the disruption of prison time that Andy's breakout engenders.

The guards' abject fear of the tunnel makes clear the disruptive potential that excremental flows wield against a form of authority predicated on eliding their existence. The guard Rory Tremont, selected to explore the tunnel due in equal part to his slender build and his reputation as "not exactly a ball of fire in the brains department" (81), becomes increasingly anxious as his forays into the space begin to stink with the signs of the sewer's domain. His first shouted report to the warden, "sounding hollow and dead," is that "Something smells awful in here" (81). Three feet further in, he repeats: "Warden, it smells pretty damn bad" (81). Finally, Tremont is overwhelmed with dread at his realization of Andy's abject means of escape. King allows Red's narration to dissolve into an extended instance of direct speech, freeing the narrator to imagine the affront that the stench of the sewer presents to the immobile façade of the prison's authority. "Smells like shit," Tremont worries. "Oh God, that's what it is, it's *shit*, oh my God lemme outta here I'm gonna blow my groceries oh shit it's shit oh my *Gawwwwwd* –" followed by "the unmistakable sound of Rory Tremont losing his last couple of meals" (82).

Though at no point does Tremont present the same imposing figure or reputation for violence of a Stammas or a Hadley, by dint of his uniform and position, vomiting in the

crawlspace at the scent of the open sewer rapidly undoes the illusion of the tight, hard gut of the prison and its enforcers. Tremont blows his groceries only after the source of the odor is confirmed to be not only shit-like but shit in fact, which reiterates the unique power of excrement above all other abject materialities to disgust and disrupt the static powers on which the prison infrastructure is founded. We can attribute this force to volume. A constellation of factors that include the regularity of intestinal waste, the perceived immateriality of liquid human wastes, and the existence of an elaborate infrastructure devoted to the accumulation of fecal matter gives way to a simple truth: There is no experience of filth as an expression of quantity more powerful or readily available than the open sewer.

The disruptive effect these flows can wield is immediately felt in King's novella. As soon as Tremont's bowels rebel, the strict institutionalization of Red's bodily responses sheds away as well. "[T]hat was it for me," Red narrates:

I couldn't help myself. The whole day – hell no, the last thirty *years* – all came up on me at once and I started laughing fit to split, a laugh such as I'd never had since I was a free man, the kind of laugh I never expected to have inside these gray walls. And oh dear *God* didn't it feel good! (82)

King's diction here, describing paroxysms of laughter and a loss of all bodily control that "came up" all at once, contrasts pointedly with Red's earlier comments on the institutionalization of his guts. The connection to Andy Dufresne's uniquely excremental mode of resistance is made shortly after, when Red laughs away a fifteen-day stint in solitary confinement by remembering, on the one hand, "Rory Tremont bellowing *oh shit it's shit*" and, on the other, imagining himself in solidarity with his friend, "Andy Dufresne who had waded in shit and came out clean on the other side" (82). In both cases, Red finds a promise of comfort in the pipes of the sewers, a

rebuke of the narrow world of the prison and the possibility that there is no stain too deep to wash clean.

Of course, this dream of the pipes as a path to salvation is under intense pressure by the time Andy finally makes his escape. Red mentions the open terminus of the sewer system, which "emptied into a stream five hundred yards beyond the prison on the marshy western side" (83). He also notes, crucially, that "the sewer-pipe running out of Cellblock 5 was the last one in Shawshank not hooked into the new waste-treatment plant, and he would have known it was do it by mid-1975 or do it never, because in August they were going to switch us over to the new waste-treatment plant, too" (83). Red later reiterates the historical specificity of the laissez-faire approach to sewage Andy's plan relies upon; it would be "a joke even funnier than the parole" if "Andy breaks into the sewer line, crawls through five hundred yards of choking, shit-smelling darkness, and comes up against a heavy-gauge mesh screen at the end of it all" (92). Andy's self-liberation, then, is predicated upon a degree of irreverence for waste that offers absolutely no physical barrier between its outflow and the water supply. Thus, in a text dominated by the methodical passage of time, the expansion of the sewer system is the lone event that spurs Andy Dufresne into quick action.

King times Andy's escape to align well with the boom in infrastructural expansion during which a prison like Shawshank would be most likely – indeed, even required - to connect to new waste-treatment plants. In addition to fitting within the historical frame of the novella, this boom coincides with King's composition of "Rita Hayworth" as well. Though published in 1982, "Rita Hayworth and Shawshank Redemption" takes places over the course of three decades, from Andy's incarceration in 1948 to Red's eventual parole in 1977. The National Service Center for Environmental Publications' *Sewage Treatment Plant Construction Cost Index* (1963) attributes

the "steady increase in the dollar volume of construction contracts awarded" for municipal waste treatment plants to the passage of the Federal Water Pollution Control Act of 1956, which aligns roughly with the start of Andy's prison sentence. The amendments to that act passed in 1972 further stipulated the timetable for infrastructural improvements, with the deadline for "public treatment works [with] a consistent and reliable manner so as to meet effluent limitations based upon secondary treatment or any more stringent applicable limitations" set as July 1, 1977, and the deadline for "the best practicable waste treatment technology" six years later in 1983 (*Start-up of Municipal Wastewater Treatment Facilities* 1). "Rita Hayworth and Shawshank Redemption," then, emerges in the narrow window for the adoption of the "best practicable…technology" for handling public waste, and seems to use the vagaries of that benchmark description to look back on the impact of the preceding decades of sewer buildup.

The impending connection of the sewage outflow signals a temporal threat that exceeds the slow passage of time over the course of Andy's incarceration. King conveys the temporal pressure of this historical transition from sewers that feed into "sluggish, polluted creek[s]" to the closed system of the waste treatment plant in terms that relate to physical claustrophobia. Red, left behind to witness the aftermath of Andy's disappearance, imagines his friend's path to freedom with a keen awareness of the overwhelming physical pressure he must have endured. He notes that the pipe Andy used to escape was "even narrower than the shaft Tremont had just descended," which would have afforded him "just enough clearance at the shoulders to keep moving" (83). He repeats "five hundred yards" several times over the course his narration, imagining the distance Andy had to travel as both relatively short as well as "damn near unspeakable" in length (83). Red relates the narrow confines of the physical space of the pipe fairly explicitly to the temporal anxiety Andy must have faced in deciding when and whether to

flush himself to freedom. He wonders "[h]ow many nights must [Andy] have lain awake under his poster, thinking about that sewer line, knowing that the one chance was all he'd ever get?" (92). The pressures of competing temporalities, Andy's dreams of eventual freedom weighed against the anxieties of possible discovery and the certainty of his one mode of escape being thwarted by the connection of Cell Block 5 to the new waste-treatment plant, leave him "just froze[n] in place for awhile" (93), stuck in time just as Rory Tremont, bigger in frame than the slender prisoner he chases, gets stuck in the wall.

The physical and temporal claustrophobia Andy experiences at the heart of his escape plot speaks to the degree to which infrastructural narratives pit the fantasy of mobility against a scarcity of space; that is, King's travels through the sewer map to a desire to find a space proper to bodies that are immobilized and marginalized. Andy and Red are both keenly aware that any space available for them to move through is not only scarce but shrinking, as evidenced by the care the former observes into reserving a space for himself within the pipes, and the effort the latter makes in narrating it. The immediate aftermath of Andy's escape disrupts Red's narration significantly, as he is forced to transition from relating "what I know" to "what I think" (84). It is telling, then, that one of the first hypotheses Red addresses is "what to do with the pulverized concrete and the occasional chunks that came out whole" as Andy tunneled (87). What immediately follows is Red's extended hypothesis that his missing friend must have "brought his wall out to the exercise yard cupful by cupful" (88).

This moment in the text stands out for several reasons, not least of which is Red's unprecedented use of subjunctive, conditional language to juxtapose his uncertainty of the method against his certainty that this concern must have weighed on Andy in secret. Considering how Andy moved the rubble from cell to yard, Red concludes that "maybe he had a couple of

cheaters in his pants below the knees" (88). This is confirmed by a "strong but unfocused memory" Red has of Andy in the yard years earlier (87), with a "little breeze that seemed to be blowing sand around [his] feet" (88). Red's admixture of "seemed" into the "strong but unfocused" recollection he has of this moment indicates the tension between his general conviction and his specific ignorance. King imbues the text here with persistent reminders of the material permanence of the prison infrastructure; Red's extended opening engagement with the mechanics of the tunnel suggests that the disappearance of the wall is more startling than the disappearance of the body it constrained. The stolid force of the prison demands a persuasive explanation in ways that Andy's wasted body does not.

It is tempting to explain Red's certainty in Andy's method to the his limited imagination outside of the historical example of the "World War II POWs who were trying to tunnel out [and] used the [same] dodge" to disperse the contents of the tunnels dug under the Stalag Luft prison camp (88), but this, I argue, underemphasizes an important element of King's exploration of the flowing sewer as a counterpoint to the stagnant prison. The contents of Andy's cell are predictably limited; he has a bunk, his limited possessions, the titular pinup poster that conceals his handiwork, and, of course, a toilet. While digging his tunnel, why would he not take advantage of the device immediately at hand that is designed to remove inconvenient fragments? Why, in other words, wouldn't Andy just flush his problems away?

The answer is simple: Andy, and presumably Red, both understand the sewer as an inherently limited counterpoint to the vast, seemingly permanent structures that imprison them. The text abounds with indications of Andy's foreknowledge that the space available for his escape would be limited, and that he must reserve a spot for his body to enter the excremental flow. Thus, through the years, Andy behaves as a "model prisoner" due to his knowledge that

"[i]t's the crazies and the stampeders that get...the outflow pipes from their toilets carefully probed" (89). Similarly, Red sympathizes with the fear Andy must have felt about something "screwing up the cellblock sewage system and leading to an investigation" (91). Andy's escape, in other words, depends as much on maintaining a physical space for his body among the prison's wastes as it does upon gaining access to the sewage outflow in the first place. His long years in prison are spent spreading the wall of his cell to the dust of the yard while also wasting his body, rendering himself excremental in order to benefit from the mobility that bodily wastes attain when connected to the waste management infrastructure.

Of course, it is telling that here again it is a white man who capitalizes on the sewer's promise of social mobility. Andy Dufresne comes to Shawshank as a "short, neat little man with sandy hair and small, clever hands" (5) and he leaves by the same route that allows Reed's Sam and Pynchon's Slothrop to evade challenges to their entrenched white privilege. King's attempts to address this the racial dynamic in the novella are admittedly clumsy, as he has Red espouse a belief in "our own brand of equality" within the penal system: "In prison every con's a nigger and you have to get used to the idea if you intend to survive men like Hadley and Greg Stammas, who really would kill you just as soon as look at you" (34). The implication seems to be a desire to somehow separate Andy's escape from his social and racial identity, but, Red's epithet-driven self-description notwithstanding, 65 whiteness seems to factor heavily into the range of privileges that enable Andy's excremental flight.

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⁶⁵ Donald Ingram Ulin addresses the casting of Morgan Freeman as Red in Frank Darabont's film adaptation of the novella as a response to the "implicitly white" character of King's original text and sees the casting "entirely alter[ing] the intertextual resonances of the film" (8). This is certainly true, and it would be interesting to consider, if space allowed, how Freeman's performance as Red further complicates the entanglement of King's text with *Gravity's Rainbow* and *The Autobiography of Malcolm X*.

Nowhere is this clearer than when, at an indeterminate point in the sixties, Andy's progress on his tunnel is halted by the only cellmate he would receive during his sentence, "a big, silent Indian named Normaden (like all Indians in The Shank, he was called Chief)" (44). Normaden stands out as one of few characters whose race is made explicit within the text, and the lazy way that he receives the generalized nickname "Chief" as a result of this further underscores the way that whiteness continues to operate implicitly even among Shawshank's prisoners. The eight months Normaden spends in Andy's cell brings the latter's tunneling to a screeching halt. As a result, it becomes clear that, quite contrary to Red's assertion that "Black man, white man, red man, yellow man, in prison it doesn't matter" (34), sharing a space with a non-white companion stymies Andy's ability to access the fluidity that inheres in the fleeting midcentury form of infrastructure that King takes up as the frame for his text, like Reed and Pynchon before him.

Thus, while the sewers' path out of the shithouse offers a vital but vulnerable subversion of the otherwise structured way that people leave Shawshank, it nonetheless continues to reflect real material inadequacies in the allocation of sewer system access. And despite these inadequacies, the temporal pressure King deploys, pitting Andy's escape against impending changes to the flow of waste through the new waste treatment plant, suggests a general unease with the progressive enclosure and regulation of such paths through the built space. The institution is set up to prolong its control indefinitely when people walk out through door instead of crawling out through the sewer, which makes King's shitty path to freedom an important path of resistance to the strict construction of infrastructural time that Shawshank Prison represents. Andy's final destination on the shores of the Pacific Ocean gives this contrast its form. By heading west from New England, Andy's excremental path inverts the trajectory of the region's

solid waste destined to be dumped from treatment plants into the Atlantic Ocean. His movement through the sewers allows him to contest the structured flow of wasted humans like him that would only leave Shawshank upon parole, but only by dint of his pre-existing racial and social privileges, which render his imprisoned body the type of waste that may yet circulate.

Flushed to the Sea: A Conclusion

There must be ways of reading the literature of infrastructure that influence our ways of thinking about public works without confusing the literary for policy. Just as *The Free-Lance* Pallbearers is misread if its conflation of open sewers and open information are taken seriously as public policy, there is surely not a tenable reading of "Rita Hayworth and Shawshank Redemption" that eulogizes the disappearance of prison outflow pipes emptying into fetid rural ponds. Reed, Pynchon, and King pair literary invention and narrative interest with details of the infrastructural boom contemporary to the writing of their respective texts in order to think critically about living in a society that is increasingly constrained by the physical structures that undergird the powers that be. Each novel effectively demonstrates the social power to be gained from adopting the excremental power to move as shit does, or, more often, to be maintained by withholding this excremental power from bodies that are rendered as shit with neither vibrancy nor fluidity. At the same time and in all three cases, a nascent worry about the foreclosure of even this limited form of mobility takes shape in the contrast each draws between the fleshy bodies that travel through sewers and the infrastructural bodies that rapidly close every gap and seal every orifice in the built space of power. The foreclosure of such openings sparks real anxiety about the extension of the physical forms of power into all walks – or, more properly,

flows – of life. Circulating bodies through the sewers in these tales invites readers to consider what's at stake in a social body that makes waste with no opening to expel it from.

Thus this chapter ends where it began, and where *The Free-Lance Pallbearers* ended: clinging to the edge of a sewer system in the midst of rapid change. From such a vantage point, to look out over the sea requires us to cast an eye over the black waters and reflect on the black bodies on which these twisted pipes have been built. The open sewer, as a plane of sheltered whiteness, emerges in Reed, Pynchon, and King as a condemnation of material conditions that convey the power of shit to some and the shame of it to others. And to shrink away from the sea and retreat into the pipes is no more promising. Reed, Pynchon, and King all look into the sewers at what is coming and find a rank distrust that problems born in the sewers will be solved by their expansion. Rather, all three of this chapter's texts remain eminently suspicious of the ways that then-impending changes to the infrastructure of waste could empower a social body that works very differently from the physical bodies that comprise it.

The solution, as I will spell out in the final chapter of this dissertation, must entail finding new ways to think about the material and relational effects that excremental thinking can have. Emboldened by the texts in this chapter and their condemnation of the imbalanced ways excremental connections are imagined, I look to supplant the physicality of the sewer system and its unseen connections with the material-social connections that come from kinship. One way of correcting the power imbalance I have articulated throughout this chapter is by witnessing the inexorable ways excrement draws people together into new kinship groups. These kinship groups, as I will show, offer new possibilities for community, drawn from the intestinal examples explored in the first two chapters of this dissertation. In place of the ominous social

body of the closed sewer that hides and endlessly recirculates its wastes, I now offer bodies endlessly and intimately entangled by their excremental knowledge of another.

Chapter Four

Excremental Kinship, or Family is a Big Job

The first chapter of this dissertation ended with wonder at the complex way that the transplantation of gut microbes from a husband's healthy colon to his wife's emaciated gut presented a new entanglement of their lives together. This final chapter starts in the same place in order to focus on a living material bond that emerges within but separate from the bonds of their marriage. Alexander Khoruts, narrating the results of his first foray into FMT, thrice affirms the similarity between patient's and donor's microbiomes. Two weeks after the transplant, he reports that "the fecal bacterial composition of the recipient was highly similar to the donor" (356). Two pages later, he reiterates: "Dramatically, 14 days after bacteriotherapy...the microbiome of the patient's GI tract...changed to closely resemble that of the donor" (358); on the following page, he again wonders at "the striking similarity of the recipient's microbiota to that of the donor," which he suggests "illustrates the importance and power of the mutualistic relationship between the eukaryotic host and its intestinal microbiome" (359). Khoruts's insistence on the sameness of these two intestinal tracts positions the stool exchanged between donor and patient as the material basis for a new form of kinship. Shit, in other words, acts like blood, but with the crucial difference that the bonds of excremental kinship can be inherited but are not hereditary. They are material but not genealogical, meaning that bonds formed in the gut can be passed along whereas the bonds of the vein can only pass down.

By focusing on mutualistic relationships, Khoruts brings to mind Marshall Sahlins's definition of kinship as "mutuality of being" and "transbodily being," and in this chapter I focus on expressions of kinship operating transbodily in two ways - between individuals and their

neighbors as within individuals and their microbes. That is, I am interested to show how the inherent sociality of the guts empowers new ways to "live and die well with each other," as Donna Haraway puts it in the introduction to her recent *Staying with the Trouble: Making Kin in the Chthulucene.* For Haraway, these new lines of connection, inseparable from the practices of kinship she invokes in her subtitle, solidify in her repeated exhortation to "Make Kin Not Babies!" This slogan, one of several that recur throughout the text, in keeping with Haraway's career-long predilection for bumper sticker summaries of her major arguments, ⁶⁶ pits two resonances of "making" against one another for critical effect. The juxtaposition of kinmaking, with its attention to productive, social ties, alongside baby-making and its association with reproduction in strictly utilitarian terms allows Haraway to emphasize acts of recognition rather than heredity as the grounds for relation.

And yet, despite the negation implied by the "Not Babies!" half of her slogan, Haraway stops short of imagining her inventive lines of kinship as strictly or solely opposed to genetic relation and the nuclear family. She promises that "[m]aking kin as oddkin rather than, or *at least in addition to*, godkin and genealogical and biogenetic family troubles important matters, like to whom one is actually responsible" ("Introduction"). My interest lies in the potential of excremental kinship to supplement, rather than supplant, other relational forms. Excremental kinship coexists with the genealogical heteronormativity that forms the nuclear family, which, I argue, suggests ways that the microbial "we" mediates other expressions of collective identity and togetherness. Thus, I distinguish my work from the preponderance of good scholarly work

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⁶⁶ Along with "We are all compost, not posthuman," Haraway explicitly places "Make Kin Not Babies!" alongside the mottos "Cyborgs for Earthly Survival" and "Run Fast, Bite Hard" from her earlier work, suggesting a political continuity in the progression from cyborg to companion species to compost, at least to the point that they could all plaster the same bumper without fear of contradiction.

that takes the "rather than" side of Haraway's kinship equation;⁶⁷ in this chapter, I choose to focus on the forms family takes when blood works in unison with other materials to draw its lines of connection.

Specifically, if not surprisingly, the matter of interest to me as the lens for this analysis is excrement, and I am not alone in finding an urgent need to account for shit and the gut's effect on the ways we relate. Donna Haraway explicitly stages her call for additional and alternative forms of kinship in *Staying with the Trouble* as a response to living "[i]n urgent times" ("Introduction"). The Chthulucene, her alternative formulation of the present characterized by the proliferation of "tentacular" connections between disparate and widely displaced beings, is meant to reflect this pressing need for this type of work. Haraway's and others' calls for new forms of kinship stems from a shared conviction that interconnections between individuals and species has reached a scale where very few effects are felt in isolation. I follow Timothy Morton in insisting that bodily wastes must matter to the way we continue to imagine this relationality within and between species. In a blog post titled "Sorry Donna, It's Not the Cthulhucene [sic]," Morton uses the excremental urgency of the present moment to question Haraway's construction of an alternate temporality in *Staying With the Trouble*. He elects to "stick[] with *Anthropocene*" because "Cthulhu is a being that doesn't link shit in its tentacles. Cthulhu means shit doesn't matter at all" ("Sorry, Donna"). Morton's dismissal of Haraway stems from her presumed use of the Lovecraft mythos, which she explicitly rebuffs, ⁶⁸ but I am more interested in the other

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⁶⁷ Given that he and Haraway reflect on new kinship practices in opposition to reproductive futurity in suggestive ways, Lee Edelman's *No Future: Queer Theory and the Death Drive* stands out as a point of comparison here, as does Janet Carsten's reflections on the concept of substance in kinship studies, particularly in *After Kinship. Antigone's Claim: Kinship Between Life and Death* by Judith Butler also merits mention in this class of works, though Edelman's note that Butler's imagined kinship "preserv[es] the tomb itself as the burial place for whatever continues to exist outside of meaning" is fairly damning (Edelman Ch.3).

⁶⁸ Haraway insists that the Chthulucene is "not named after SF writer H.P. Lovecraft's misogynist racial-nightmare Cthulhu (note spelling difference), but rather after the diverse earthwide tentacular powers and forces and collected things" (Ch. 4). Whether or not Morton' ignores his "mutual friend['s]" comments here intentionally ("Sorry

implied element of his thinking: that excrement is of crucial importance in the way new lines of kinship inflect our ways of thinking about each other and the world.

Throughout this dissertation, I have been consistent in articulating shit as a medium that is social across scales. I have taken pains to claim the communities of the gut, the foreign on which the familiar rests, as the specific purview of scatological analysis. As a site of vast microbial hybridity, feces reveal bodies to be composed by and reliant upon intestinal others, and it is for this reason that I turn to shit as the expression of a potentially fleeting material bond shared among beings. ⁶⁹ In what follows, I use "excremental kinship" and its derivatives to refer to relation practices that are governed by conditional connections. This form of kinship is materially tied to the vibrant hybridity and cultural codes of care that govern contact with shit. The bonds this kinship makes, moreover, may accompany biological relations, but they remain independent of heredity or lineage.

I elaborate on these bonds as they are articulated in the three novels at the heart of this chapter. Following a brief elaboration on Haraway and the other critical texts that inform this concept of excremental kinship, I emphasize how Mike and Patty's kinmaking practice of "jobbing" in Nicholson Baker's *Room Temperature* (1990) helps position excremental kinship as an expression of playful contingency at the heart of the family narrative. I then read the attempts of A.M. Homes's avuncular protagonist in *May We Be Forgiven* (2012) to claim his orphaned

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Donna"), it speaks to the difficulty we have in imagining that Haraway fully severs her chthonic temporality (note spelling) from the tentacular visage of Lovecraft's eldritch horror.

⁶⁹ I attribute this underlying material concern less to this chapter's excremental subject matter and more to the fact that kinship itself always implies a fundamentally material connection. Sara Ahmed shows that, even when kinship objects are distanced from the biogenetic traces entangled in Janet Carsten's sense of substance, those objects both make and become family. This strongly suggests that, whatever we mean when we talk about kinship, it remains inseparable from and reliant upon a material substrate. Emphasizing material mediation, it turns out, is crucial for kinship's continuing salience as a critical term absent the discourse of biological heredity; as David Schneider asks, "if kinship was purely social and in no way physical, how was it to be defined, what was it, how was it to be distinguished from any other kind of social relationship?" (190).

niece and nephew as a new kind of kin, often by handling their – and his own – shit in new ways, as a blueprint for excremental kinship before concluding this chapter with Katherine Dunn's *Geek Love* (1989). In particular, I emphasize the conjoined twins Iphy and Elly's uniquely embodied relationship with one another and suggest the degree to which the bowel they share mediates family as the determining factor for their relationship. I offer the twins' "common intestine" (Dunn 51) as the symbol par excellence of excremental kinship as it lives alongside the blood ties of the nuclear family.

In all of this, I find excremental connections between Baker's husband and wife, Homes's uncle, niece, and nephew, and Dunn's sisters. My hope is that varying my perspective in this way helps to show the ways that excremental kinship underscores an element of contingency and fluidity that runs throughout the various manifestations of the biological family. It should be clear, then, that the three novels at the heart of this chapter are arranged in a precise order. In *Room Temperature*, with its language of jobbing and the thrill of disgust deferred, the practices of kinship ground Baker's young family in a game of potential flux and reformation. *May We Be Forgiven* revels in the excremental stewardship, to borrow Sarah Ensor's terminology, by which kinship is maintained absent the parent-child lineage that Baker portrays. Finally, in *Geek Love* Katherine Dunn shows how these excremental kinship practices inflect the family at the end of the lifecycle of heredity. I bring this dissertation to an end with her idea of the common dissertation in order to show how the reading of guts that I have pursued throughout this project positions kinmaking as a process of making a mess, and a decidedly scatological one at that.

The Abject Avunculate

Haraway's stated interest in "the particular kin and kind nursed on the fluid and solid effluvia of terra in the late twentieth and early twenty-first centuries" aligns her chapter "Awash in Urine: DES and Premarin in Multispecies Response-ability" well with the excremental emphasis of this project writ large and this portion of it in particular (Ch. 5). Haraway spins a tale of kinship between horse, dog, and human mediated by two forms of urine, specifically the horse urine used to produce a synthetic estrogen to control canine incontinence. In a project like mine, this possibility is, for obvious reasons, alluring, as much of my work in the chapters preceding this one has been to suggest various ways bodily waste mediates modern theories of embodiment and sociality. But rather than our shared interest in abject affinities, I want instead to emphasize Haraway's depiction of kinship in this chapter as a mode of relation we both make and acknowledge.

Haraway suggests that expanding kinship beyond the bounds of the human unearths our responsibility "to and for shaping conditions for multispecies flourishing in the face of terrible histories," a dynamic of care and response she dubs "response-ability." It is hard to tell whether Haraway imagines kinship, or these "conditions for multispecies flourishing," as preceding or resulting from human mediation. She reflects on "shap[ing] kinships with the attachment sites of this molecule," which suggests that excrement gives kinship its shape, but not its existence. Yet elsewhere she acknowledges that this horse-human-dog dynamic is only called into being by human agency. The dog Cayenne, she notes, does not start taking DES so much as she, Haraway, starts giving it to her. She also invokes the "vats of Canadian equine urine" as "the only thing that seemed to hold together the virally exploding, vulnerable species of [her] tale," which makes

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⁷⁰ Unless otherwise noted parenthetically, all subsequent citations from Haraway's *Staying With the Trouble* are from Chapter 5.

it clear that this line of connection among species threatens to collapse without continuous mediation.

I find it helpful to start with Haraway's construction of kinship as simultaneously created and inherited due to the ways it echoes the entangled relationship between human agency and the human microbiome. As I detailed in the Introduction and first chapter of this dissertation, advancing knowledges of the gut that emerge over the course of the long century of shit make it increasingly difficult to separate human action from its symbiotic entanglement with the life of, or rather in, the guts. Thus, as Haraway uses "kinship" to refer to the precarity shared among various forms of life as well as to the responsibility to navigate that network of vulnerability ethically, I am invoking it here to emphasize how this network of vulnerability always already inflects interactions between the forms of life Haraway tends in the form of kinship exchanges between macro and micro forms of life. Response-ability is predicated on recognizing that certain forms of life are more exposed to the excesses of anthropocentrism than others, meaning that the goal of these ethics is to correct for an inherent lack of mutuality. Under such conditions, making kin becomes an act of recognition, whether of the shared capacity for material interaction or of the responsibility to mitigate the potentially uneven results of those interactions. My intervention is to further displace the anthropocentric by emphasizing the symbiosis of the guts in its stead. In so doing, I hope to inspire a new ethos of openness by showing how there is no experience of anthropos that is not grounded in mutuality. To recognize kinship is to acknowledge an underlying material connection that meaningfully bonds entities across the gulfs of scalar, cultural, or species differences; to simultaneously accept kinship as a something to be made is to embrace an ongoing role in preserving that mutuality for all entities so entangled.

What Haraway calls response-ability, Sarah Ensor calls stewardship. In "Spinster Ecology: Rachel Carson, Sarah Orne Jewett, and Nonreproductive Futurity," Ensor stages an encounter between the discourse of kinship within contemporary environmentalism, which has traditionally been legible through a discourse of maintaining a world as inheritable and thus explicitly future-focused, and queer theory's proscription against this type of reproductive futurism. Ensor draws formalist and biographical readings of non-genealogical stewardship out from Rachel Carson's seminal *Silent Spring*, and alleges that Carson "posits a future far more entangled and varied than either Edelman or today's environmentalists tend to promote" (417).⁷¹ By recognizing kinship when it is found, Ensor, like Haraway, suggests a manner of relation that somehow exceeds its social realization, while at the same time they turn their back on the anthropocentric implications, meaning originating solely or even primarily in the transfer of human genetic information, that this understanding of family seems to have.

Indeed, this shared practice of kinmaking as a recognition of non- or semi-biological mutuality implicitly grounds Ensor's argument, as she builds her spinster ecology around the aunts who populate Sarah Orne Jewett's *Pointed Firs*. Ensor models a queer ecocritical practice of an intransitive futurity mobilized by "an avuncular form of stewardship [that] tend[s] the future without contributing directly to it" (409). Ensor celebrates Jewett's spinster figures for the way they "structurally sit between – and demonstrate the limits of" concepts of kinship (420). As emblems of the avuncular, Jewett's spinster aunts relate to the characters of *Pointed Firs* in a way that affirms the integrity of the biological family, while at the same time their relation disrupts the line of genealogical descent that relies on the progression from parent to child. The

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⁷¹ Of course, in the years since "Spinster Ecology" was published in 2012, this entangled and endlessly varied future has emerged as the preferred object of materialist ecocritical studies, of which Haraway's *Staying With the Trouble* serves as an illuminating example.

undercurrent of kinship that permeates these new ways of relating to the future operates with precisely this doubled move of affirmation and rejection.

Ensor traces the paradoxical adjacency to and alienation from the family she builds her spinster ecology on back to Eve Kosofsky Sedgwick's thinking in "Tales of the Avunculate: Queer Tutelage in *The Importance of Being Earnest.*" Published in her 1993 collection *Tendencies*, Sedgwick's essay frames her analysis of the web of relations between the characters in Wilde's play as a response to the notion that "[r]edeeming the family isn't, finally, an option but a compulsion; the question would be how to *stop* redeeming the family" (72). She suggests that, in order to "Forget the Name of the Father," we must instead "Think about your uncles and your aunts" (59), and develops her concept of the avunculate as a means to render visible new forms of relation. For, while avuncular relations unfold in terms that abut with the discourse of child-rearing and genealogical descent, aunts and uncles are, as Sedgwick puts it, a bad fit within these structures. Having aunts and uncles deconstructs the very illusion of linear biological progression from parent to child by redirecting attention to the parent-as-sibling.

Sedgwick argues that this function of the avunculate opens our eyes to relations predicated on "a varied, contingent, recalcitrant but re-forming seriality" (63). I follow her on this trajectory in order to propose, simply, reading the avunculate as a way to think differently about entanglements across scales, particularly as a complement to other forms of material connection such as the nuclear family. Insofar as Sedgwick's essay asks us to consider "the importance of residual, re-created, or even entirely newly imagined forms of the avunculate" (62), I want to offer excrement as an avuncular residue that has, or should have, much to offer in imagining a shared experience with no illusions of obligation in perpetuity in the way that blood relations are conceived. In much the same way that Sedgwick sees Wilde's uncles, and Ensor

sees Jewett's spinsters, as existing within and outside the bounds of the nuclear family, shit operates as a substance that is simultaneously familiar and foreign. In this duality, shit serves as the constitutive substance for a mode of relation that cedes primacy not to permanent genealogical bonds but rather to conditional alignments of intimacy.

"Would disgust ever outweigh love?": Conditions of Kinship in Room Temperature

Nicholson Baker's fiction is founded on the proliferation of minute details and cognitive associations to thwart any expectation of progression and narrative flow. Baker's associative flights and digressive allusions revel in the contingent, conditional relations between materials and ideas. Françoise Sammarcelli sums up Baker's cavalier approach to plot succinctly: "Almost nothing happens in Baker's novels" (2).⁷² In "What Happens When Nothing Happens: Interpreting Narrative Technique in the Plotless Novels of Nicholson Baker," Bo Pettersson agrees. He analyzes how "description suggests new ways for the plot to go on" in Baker's first three novels (45).

Sammarcelli and Pettersson both arrive at this understanding of Baker's oeuvre from comments made by the author himself, who offers this frank and characteristically circuitous self-assessment of his approach to writing in *U and I: A True Story*:

The only thing I *like* are the clogs – and when, late in most novels, there are no more in the pipeline to slow things down, I get that fidgety feelings, and I start bending the pliable

narrative and the conditions of excremental kinship as strong evidence that a project like this, considering how scatological perspectives entwine with conceptions of embodied togetherness, is sorely needed.

173

⁷² Something that even Sammarcelli admits *does* happen in *Room Temperature* is Mike's recollection of a panic attack he experienced while touring a walk-through model of the human heart at the local science museum. Sammarcelli reads this scene as "emblematic" of Baker's subversion of inside/outside distinctions in which "the protagonist experiences claustrophobic panic, while the reader smiles at this recycled cliché of fantastic fiction" (5). It is my hope that the reader of this dissertation will refer back to my chapter on these clichés of the human body explored before joining Sammarcelli with a grin. I take the implied connection between the fecological body

remainder of the book so that it makes a popping sound, and I pick off the price sticker on the back and then regret doing so and stick it back on because it is a piece of information I will always want to have (a delight, as Updike memorably says of picking at a psoriasis lesion, thereby capturing a whole world of furtiveness we would otherwise not know about, that "must be experienced to be forgiven"). I wanted my first novel to be a veritable infarct of narrative cloggers; the trick being to feel your way through each clog by blowing it up until its obstructiveness finally revealed not blank mass but unlooked-for seepage- points of passage. (73)

To be sure, cloggers abound in throughout the twenty minutes that comprise the plot of Baker's sophomore effort *Room Temperature*, during which the narrator and new father Mike feeds his infant daughter on the floor of her nursery. I turn to this short novel first in order to engage with Baker's profound attention to excrement as the foundation for a mode of alterity. Given the novel's close attention to the intimacy of the nuclear family, the seepage revealed by clogging these pipes is inextricable from the practices of kinship. In *Room Temperature*, Baker's narrative cloggers disrupt more than the work of the plot. Despite the novel's investment in the appearance and conventions of the traditional family drama, Baker's model of excremental kinship shows how family bonds are forged and maintained through contact with all forms of bodily effluvia. The intimacy that emerges from handling shit to make a family is powerful and yet fleeting. Shit makes families that remain contingent on the continued practice of excremental contact, rather than remaining frozen in relation to one another by a single, concretizing declaration of kin creation.

Though the twenty minutes of the primary narrative unfold on floor of the nursery,

Mike's reveries while bottle-feeding Bug reach far back into earlier moments of his and Patty's

shared life in order to imagine and understand his parental role scatologically. "[S]oon after the Bug was born," Patty asks him if he "had ever fantasized when [he] was small about giving birth, as she had" (81). His first memory is studying pictures of a woman in childbirth and then "go[ing] upstairs to the bathroom and stand[ing] in front of the door's mirror puffing out [his] stomach and running [his] hands over it as over a crystal ball, imagining the pressure of pushing a whole child through one's crotch" (86). This fantasy continues apace until finally

it was time to arrange two double-square lengths of toilet paper on the tiled floor to form a small square target, and (only if I knew myself to be sufficiently constipated that I wouldn't make a mess) try, still standing, to labor out a small pebble of a job so that it fell onto the toilet paper, while at the same time keeping clearly in mind the good-hearted struggles of the *Family of Man* woman, pretending to wince as she had with selfless pain, tightening all my neck tendons as I pushed with her for this worthy cause. (86)

While Mike's juvenile conflation of childbirth with bowel movements is a source of some embarrassment to him later in life, when he dismisses the memory "brusquely as valuing crude feeling over rational thought" (87), the lingering power the memory has for him in recounting it to Patty serves to underscore the novel's exploration of the variety of excremental forms kinship can take. Mike's experience of fatherhood is mediated by shitty thinking. As a child, he correlates the creation of another body with his nearest comparable experience of straining to release a turd tightly packed by constipation. By casting his fecal fatherhood as a game of skill, Mike's childhood memories suggest a ludic quality to kinship that is wholly incommensurate with the discourses of biological heredity but consistent with the precepts of creative kinship Haraway prescribes.

In addition to interpreting biological lines of relation through scatological play, Nicholson Baker also uses excrement as a path to kinship outside of genealogy. That is, Mike constructs his relationship with Patty through shit in much the same way he relies on bodily waste to ground his paternity. The level of intimacy between the two correlates to the increasingly scatological ways they conceive of their relationship. Baker's play with pet names throughout the novel couches this increasingly excremental mode of communion as a function of linguistic permutation. As Mike cycles mentally through the permutations his name has taken over the course of their relationship, he notes that Patty's affectionate names for him depart more and more from variations on "Mike" as they grow closer and closer. In courtship, she went from Mike to "Micky, Mickanore, Norker, Yamanicky, Yaminore, Immiyam, Noser's Yam, Mokey, Inky, Inker, Sphincter, Sphinx, Immanore, Immydear, Sippydear, [and] Simpy" (36); once married, she trades in "linguistically inexplicable forms like Hornefleur, Fatboy, Lowbrow, and Dark Shitter" (36-7). The progression from diminutives for Michael like "Micky" to the medial "Sphincter" and the terminal "Dark Shitter" suggests that the two measure the growing closeness between them by the degree of excremental familiarity they are able to apply to naming.

It stands out, of course, that Mike associates the recent upsurge in this type of scatological relation to the codification of their relationship status as husband and wife. He is keenly aware that Patty's "endearments became bolder and more hermetic after [they] got married" (36), though he stops short of acknowledging the intestinal bent of her hermeticism. This boldness, moreover, manifests in more ways than just naming. Mike reflects back fondly on a moment, shortly after they got engaged, when Patty, "instinctively sensing that [they] had to find some further upward cranking of intimacy that would celebrate [their] newly permanized relationship" (78-9), starts to describe her bowel movements with creative euphemisms and

inspires Mike to do the same. She excuses herself by announcing that she "need[s] to go big job" to the delight of her then-fiancé and eventual husband, who finds in the exchange "the thrilling promise that now that [they] were engaged, [they] would be in no doubt about the specific purpose of [their] trips to the bathroom" (79). Baker's repeated attribution of this uptick in such scatological affinities to the pair's entry into matrimonial kinship emphasizes the use excrement thinking can have in navigating the creation of this new, presumably more intimate bond and group identity. Through jobbing, Mike and Patty find there is "so *much* to share" (81), which effectively, if somewhat perversely, blurs the distinction between the material waste and emotional closeness this bathroom intimacy produces.

Given this, it is particularly interesting that some of the appeal this discourse of jobbing holds for Mike and Patty is not that it shores up their union to all challenges, but rather that it intimates a possible cleavage of intimacy that the two must overcome to continue in closeness. They remain keenly aware and seemingly even appreciative of certain boundaries yet uncrossed by this new frank discourse of jobbing. They refrain from "jobbing in each other's immediate presence, and only in emergencies was one person allowed to job while the other was in the shower" (79). This "tasteful limit" suggests an intimacy threatened by excess (79). As Mike and Patty "use[] unsavory physical revelations to test adoration's power to absorb and transform the crudest provisions into lovable and revealing things about each other" (78), the emphasis is less on the adoring result and more on the disgusting test, the success of which is far from assured. When Mike finally relates his childhood shit-pregnancy fantasies to his wife, he worries that he "might not be passing some limit beyond which her affection, lacking the pure horsepower necessary to twist an image intrinsically this unpleasant into something lovable, would begin to falter" (88). Rather than contesting the closeness they achieve through excremental revealation,

these worries create that very intimacy; "this unease," Mike notes, is "part of the exciting risk of [their] mutual revelations" (88).

It should be difficult to separate the form of togetherness that develops from this practice of intimate risk from the familial introspection that Baker pursues throughout *Room*Temperature, but the excremental connections between Mike, Patty, and Bug appear to have been sloughed off into the same scholarly lacuna where dwell any such suggestion that shit might do something in literature. In his volume on Nicholson Baker for Matthew J. Bruccoli's
Understanding Contemporary American Literature series, Arthur Saltzman offers a reading of
Room Temperature in which Mike's "least savory habits and private crimes against hygiene" somehow exceed the novel's central conceit of reconstructing a full life from any twenty-minute snapshot it contains (38). Any such reconstruction of Mike from the twenty excremental minutes
Baker gives us would, per Saltzman, "be even more comprehensive than the ambition based on
'autobiographical interest' would require" (38). Saltzman's flippant approach to the excremental tones of Baker's novel reaches its zenith in his closing remarks on Mike and Patty's relationship, when he suggests that

Basically, Mike is a fellow fortunate enough to have found a woman willing to hear him regale her about the connections between drinking coffee and worsening sinuses, if only he will listen to her confessions regarding how inspecting interior decoration compilations or white-sale circulars brings on the need to move her bowels. (47)

The suggestion here that each merely abides the other in order to secure a sounding board for her or his own eccentricities obscures the pains Baker takes to portray this relationship in terms of genuine passion for one another's interests. Furthermore, in reducing the scatological intimacy Mike and Patty practice together throughout the novel to the latter's "confession" of an urge to

defecate, Saltzman effectively severs the provisional conditions of their marriage from his analysis of Baker on the subject of family.⁷³

The conditions of creation are of course of profound interest to Nicholson Baker throughout *Room Temperature*; in fact, I argue that it is precisely this attention to the provisionality of relation-making that accounts for the text's adroit engagement with the forms of excremental intimacy. The brief timeframe of the novel is grounded in Mike's in-text conviction that "with a little concentration one's whole life could be reconstructed from any single twenty-minute period randomly or almost randomly selected" (41). His attribution of the character of a lifetime to any narrow temporality "almost randomly selected" emphasizes the extent to which minor details can fundamentally destabilize arguments of determinative certainty. Almost random, of course, is hardly random at all. If we take the convoluted back-and-forth temporality of *Room Temperature* as an opportunity to imagine how past and present converge into a possible future, Baker's inclusion of this caveat in Mike's philosophy emphasizes that we can only approach a certain futurity by retroactively constructing it from conditional details in the then-past and present. The surety of ongoing relations, then, are shown to be illusory, which further emphasizes the degree to which contingency reigns throughout *Room Temperature*.

Moreover, it must be emphasized that the rationale for the novel's narrow temporality is intimately bound up in the guts of things. Mike's theory of the 20-minute life-in-miniature, from

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⁷³ Much of my critique of Saltzman in these pages could likely be attributed to the target audience for the *UCAL* series. In the Editor's Preface, Bruccoli groups "students" with "good nonacademic readers" as those "[u]ninitiated readers [who] encounter difficulty in approaching works that depart from the traditional forms and techniques of prose and poetry" whom his series addresses (ix). In this light, Saltzman's dismissive tone emerges as an attempt to keep a presumably befuddled reader, disinclined to read further, reading further nonetheless. Christine Photinos's recent essay on the potential damage done by study supplements that effect this type of overly casual tone is instructive here. Let it be said, in closing, that I take the mere fact that a book like Saltzman's appears in this chapter as damning proof that *Room Temperature* has received far too little serious scholarly attention.

which Baker assembles the plot of the novel, is "permanently influenced" by his childhood memories of

a picture I had often looked up as a boy in one of the early Time-Life books – perhaps one on genetics or evolution: it was of a frog that had been cloned from idioplasm sucked out of a single intestinal cell of another frog. The two frogs were posed side by side, and the artificial sibling was unquestionably complete and froglike in every detail; but I noticed that it wasn't an exact replica: it had a disturbing and somehow gastrointestinal pallor in its mottling, and an unhealthy, pear-shaped, I-was-raised-in-a-petri-dish-and-know-little-of-mud-and-reeds type of body that betrayed its origins. (41)

From this memory, Mike constructs the theory of the 20-minute reconstruction that I summarized earlier. However, the cloned frog and its "gastrointestinal pallor" leave him acutely aware of the determinative effect that the conditions of creation can have on their outcome. In reconstructing a life from any snapshot so taken, "you had to expect that a version of your past arrived at this way would exhibit, like the unhealthily pale frog, certain telltale differences of emphasis . . . The particular cell you started from colored your entire re-creation" (41). That Mike's own recreation starts from a cell nearer to the end of the alimentary canal than to the beginning is consistent with Baker's larger interest in the various forms this excremental intimacy can take. ⁷⁴ Moreover, by casting this cloned frog as the "sibling" of the original, Baker portrays the guts as a source of kinship relationships that skirt the expectation of a strict line of descent. Excremental kinship

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⁷⁴ This interest, I argue, is not specific to *Room Temperature*, though here Baker's contemplation of these forms of relation reaches its zenith. Throughout *The Mezzanine*, Baker reflects on chance encounters with strangers and the warmth of their bodies, recalling "that sometimes embarrassing touch of a stranger's warm hand" when receiving change in a store as well as the curious litter of cigarette butts, "still warm from people's lips and lungs," thrown out car windows at speed. These fleeting, provisional nodes of contact reach their crescendo during the long sequence detailing Howie's thoughts on the office restroom at work, where he "never really [feels] at ease reading the sports section left there by an earlier occupant, not happy about the prewarmed seat."

begets siblings as easily as progeny, which destabilizes the determinative effect of relation by blood.

Through shit, then, *Room Temperature* redeploys the nuclear family as a kinship unit that, rather than being static, is always open to reinterpretation by the persons involved. Though Mike, Patty, and Bug's kinship group is most readily defined by the biological relationship they share, Baker takes care to show how the nuclear family remains contingent upon practice and play with the deferred risk of fracture instead of static genealogy for their mode of togetherness. This is but one manifestation of excrement's power to draw new lines of relation, and as I move away from Room Temperature, I want to make explicit a point that I have only implied up to now, which is that not all excrement activates excremental kinship. These forms of relation are not always activated by excremental encounters, nor, I imagine, is excrement the only kinship object that could engender these fleeting mutualities of being. Given its account of a young father and mother Mike and Patty's joint efforts to care for their infant daughter Bug, Room Temperature certainly abounds in bodily fluids and expressions of kinship, but my attention falls on those moments of kinmaking with a specific character that tempers the future-first orientation of Mike and Patty's parental relationship to their daughter Bug with playful expressions of dissolvability.

When excrement mediates kinship, it reveals a substrate of interconnection that preexists its visibility while also relying on social exchanges that are grounded in the present for its expression. Whereas Baker showed excremental kinship as an accompaniment to the conventional mother-father relationship, I now want to direct my attention to moments of care and connection among characters in the absence of these biological markers of family. Excremental kinship offers a form of care that is not invalidated by the presence of children in

each of these novels, but rather shows how contingent and non-genealogical forms of kinmaking undermine the certainty of a future in waiting. In deference to the role that Ensor's and Sedgwick's concepts of the avunculate play in guiding my response to bodily residues in this chapter, my exploration of the excremental family drama thus continues with Harry Silver, the reluctant uncle at the center of A.M. Homes's *May We Be Forgiven*.

"It's like a freak show, a random collection of people": May We Be Forgiven and the Excremental Path to Togetherness

The nuclear family, its limits, and its alternatives are persistent themes across A.M. Homes's fiction. Elaine Showalter characterizes Homes's stories as "grisly cautionary tales of independent girls and young women living at the edge of urban gender boundaries" (497), which she contrasts with the 90s-era chick lit and its tendency toward traditional marriage-and-family resolutions. Sadie Wearing develops a compelling reading of the representation of dementia in contemporary fiction with deference to Homes's "view of the literally nuclear family as uniquely toxic" (46), and in *American Unexceptionalism* Kathy Knapp's one-sentence summary of *May We Be Forgiven* reads Harry Silver, Homes's protagonist, as "reckon[ing] with his role in destroying one family in order to assume a place in a new, radically altered vision" (xxxix).

We can, it would seem, comfortably follow Mary Holland's contention that "family is the point for Homes" (217). In this, my work with *May We Be Forgiven* responds to Holland's argument about the two novels that immediately precede *Forgiven* in Homes's bibliography. In "A Lamb in Wolf's Clothing: Postmodern Realism in A.M. Homes's *Music for Torching* and *This Book Will Save Your Life*," Holland offers Homes as the example par excellence of what she calls literary postmodern realism, which is meant as a response to Sanford Pinsker's assertion

that "[p]ostmodernist experimentation failed not only because its dazzling surfaces were hollow at the core, but also because . . . its families [had] no force" (515). Her argument is twofold: first, that Homes must be considered a postmodern writer, and, second and accordingly, that "postmodern fiction never stopped imagining 'fully human families,' or pondering the individual's struggle to define her- or himself 'in the larger context of families'" (233). This would put Homes at the forefront of a group of prominent contemporary novelists who balance "blatantly poststructural writing styles and narrative structures such as metafiction and hypertext" with an interest in the close domestic relationships as a locus for themes of loss and belonging (232). But Holland does not define exactly what she means by "family" in Homes's fiction. She makes it clear that that kinship groups that interest her do not work as "families in postmodern fiction [do] – comprising pairs and groups of wildly different people related and not, living together and not – tend[ing] to scatter and break, gather and bond, members drifting toward and away from each other in equal measure" (215-6). She also offers Homes as a significant contributor to the "contemporary framework . . . in which the human and the human family must be reimagined" (233); elsewhere she invokes "rebuilt families" as well (216). All of this suggests that her reading of family in Homes is less conditional than Pinsker sees it in postmodernism while also reworking the traditional modes of relation. Wearing, by contrast, envisions a more conclusive break from the narrative of family. May We Be Forgiven, she argues, "reveals the brutality and violence at the heart of the suburban heterosexual family unit" and replaces it with a new mode of community that "is marked not by blood ties but by different and contingent (if not actually 'chosen') forms of kinship" (58, 61).

I argue that this uncertainty over the role genealogy plays in determining kinship manifests in the text through Homes's deployment of shit as a kinship object. Shit's hazy status

as a signifier of genealogical connection prompts an approach to kinship that mimics the nuclear family while also disputing blood as the sole originary condition for kinship. A.M. Homes dissolves several kinship groups before recombining their orphaned fragments into a new form of community. Excrementa of all kinds play a pivotal role in the creation and maintenance of this invented kinship.

May We Be Forgiven opens with the violent dissolution of two families. The television executive George Silver suffers an unspecified psychological break, first killing a mother and father in a car accident and then his own wife in a fit of rage when he finds her in bed with his brother Harry. As Kathy Knapp emphasizes, these paroxysms of violence unfold with startling speed. Jane, George's murdered wife, is buried by page 50, leaving several hundred pages for Harry to pick up the pieces thus scattered. Over the course of the year between one Thanksgiving to the next, Harry effects a startling, multistage transformation; he goes from married and moderately happy to, by dint of his infidelity, a wayward bachelor and then ultimately to a quasifather figure for an ever-widening circle of familial castoffs. He first steps in to care for his brother's children Nate and Ashley. They convince him to reach out to Ricardo, the boy their father orphaned. To this younger generation he adds an older one. His occasional lover Amanda abandons her elderly parents Madeline and Cy to his care; after welcoming them into his (brother's) home, Harry rents out their house to Mr. and Mrs. Gao, the owners of the Chinese restaurant he patronizes with alarming frequency throughout the novel, and thereby completes his kinship group.

Harry's aunt Lillian puts it bluntly when she sees the assemblage gathered at the table for the second Thanksgiving dinner with which the novel ends: "It's like a freak show, a random collection of people" (477). At the heart of a gathering, the table mediates relation and orients the group. The novel's closing scene, which Kathy Knapp dubs "shamelessly sentimental" in its evocation of the happy family gathered around "an infinitely expandable table to which all are welcome" (134), finds the new Silver assemblage reveling in the coherence they have achieved through the mediation of their kinship objects and practices. The setting of this scene is certainly instructive, recalling what Sara Ahmed has to say about tables as kinship objects. In her recent *Living a Feminist Life*, Ahmed meditates briefly on these "objects that give family its form" ("Lesbian Feminism"), while in her earlier *Queer Phenomenology: Orientations, Objects, Others* she likewise considers how kinship objects "might enable forms of gathering that direct us in specific ways or that make some things possible and not others" (58). This is, it should be noted, also how the avunculate operates. Sedgwick describes the avuncular as a means of reflecting on the patriarchal and heteronormative relations of parents to child while also functioning as a relation unto itself, one that bears the scent but not the weight of the nuclear family.

Acknowledging shit as an avuncular residue means remaining attentive to the way it functions simultaneously as a relational actor and object. Sara Ahmed's interest in tables and the way they operate as kinship objects to mediate the way we relate to one another is instructive here. Ahmed suggests that such objects blur the lines between kin and the material means by which relations are mediated. Per Ahmed, through use kinship objects cease to be the technology of relation and become kin themselves; when families coalesce around the kitchen table, "the table becomes a relative" (56). But given that, as Ahmed also says, a "shared orientation toward the table allows the family to cohere as a group" (56), it stands to be asked: what brings this group to the table in order to be oriented in the first place? Shit does. For all the readings of A.M. Homes's fiction in general, and *May We Be Forgiven* in particular, that emphasize the creation of queer new forms of kinship, her reliance on scatology to craft that kinship remains untheorized.

Homes routinely considers how handling our shit, and others' shit, brings people together, to the point that bathroom habits emerge as the most reliable indicator of the intimacy between characters in the novel. I am interested in moments where shit operates as a kinship object in the way that Ahmed describes a table. It activates and mediates relation, and in so doing it becomes a relative unto itself.

To wit: George Silver, brother, father, and murderer to various characters in the text, thwarts kinship throughout the novel. Homes embodies this disruptive role in his sustained reluctance to observe the proper flows of waste within the communities he inhabits. The first sign of Harry's strained relationship with his brother comes early in the novel, when he notes that "[t]here is a television in every room; fact is, George can't bear to be alone, not even in the bathroom" (2). Harry brings this up later to his brother's doctors, repeating to them that George "can't bear to be alone. Even when he's peeing he needs someone to be talking to him" (158). George, it would seem, dissolves the groups that claim him by refusing to observe the proper organization of shared spaces. He ignores the conventions that dictate where waste goes and how to behave in the spaces marked for these actions. Immediately following the car accident that kills Ricardo's parents, George collapses into a chair in the living room as "[b]eneath him a puddle forms" (7). Jane has to inform him that he's "having an accident" in the middle of the living room (7). George clings to this disruptive power even when he is first admitted to a mental hospital for monitoring. He refuses to use the bathroom while there, swearing, "I can't look at myself in the mirror – I can't" (10). Through these repetitions, Homes creates a strong association between George's antisocial opposition to kinship and his distaste for the strange confluence of solitary and communal space that marks the bathroom. George's aversion to being alone in the bathroom seems to be a function of the social contract that prescribes solitary

ablutions. His unwillingness to oblige the social needs of others makes the isolation of the toilet anathematic, and paints his accident in the living room as a sign of his resistance to kinship.

Virtually every other relationship within the novel is influenced by excremental exchanges between the people involved. Spaces of interpersonal dependency and intimacy are coded as such by their excremental smell. When Harry is hospitalized for a sudden stroke, the man he shares a room with opines that there is no real difference between lingering in hospice and dying in the hospital (which he ultimately does), as both places "smell like shit" (113). The nursing home where Harry visits his mother also "smells like shit" and still "stinks like old diapers" when Harry returns later (56, 385). These facilities are an important component of the "questions of dependency, care, and relationality" that Wearing raises in her reading of the novel, which appears in a collection on literary representations of dementia. For Wearing, the circles of care between unrelated people throughout the text reconfigure the concept of family to better reflect the meaningful kinship caregivers create. She celebrates Homes's compassionate representation of individuals with dementia and emphasizes the novel's recurrent interest in how the trajectory of care reverses for children caring for elderly parents. In this, Wearing is surely right to emphasize Homes's "reconfiguration of intimacy along lines of chosen kinship patterns" (60), but she overlooks how often a fecal odor marks this reversal.

Homes is rigorous in detailing the process by which these new lines of kinship are forged through excremental contact. Strangers grow together when the waste of one becomes the concern of the other. Amanda finally accepts her father's inability to take care for himself when he suddenly goes missing on an errand and she finds him "peeing in one of the display toilets" of the local hardware store (394). In part because Cy has "always loved scatological humor" (401), he and Madeline are entrusted to Harry's care. However, this is not to suggest that the kinship on

offer in Harry's reconfigured family home is somehow more steeped in shit than its alternative, a more traditional elderly care facility. The odors with which these institutions are associated foreground the extent to which questions of shit serve as shorthand for a new calculus of intimacy in which self-selected support networks outgrow the nuclear family. Harry's disbelief at his mother's rejuvenation through dance therapy and swimming underscores the unreliability of biological kin in determining suitable forms of care. Her swimming instructor's gentle reminder that there is to be "[n]o pushing, no splashing, no pooping in the pool" establishes this alternate care network's ability to create community by reinforcing meaningful boundaries of shared space (449), of precisely the kind that marked George as unfit for kinship.

Homes drives this point about the alternate kinship of these care facilities further still by pairing the Silver matriarch with Bob Gold. Homes pivots away from a heteronormative matrimonial coupling here by leaving Gold still married to his wife and with children who vehemently oppose his new relationship. Thus the pair can only commemorate their union with a commitment ceremony that is explicitly "not recognized by the state" and "not binding" (365), which positions this coupling as a clear counterpoint to the norms of marriage. As I argued in the previous section, contingent modes of relation are consistent with excremental intimacy writ large. Moreover, by contrasting the Silver and Gold union with the "official" weddings that it "costs less than" (365), Homes suggests that the forms of closeness associated with the cloacal and clinical smells of these institutions offer some measurable benefits over the traditional forms they replace. New associations are demanded when existing methods of waste management fail; these new associations bring new forms of family into contact with the body's foul matters and vulnerable smells.

With this in mind, it stands out that George's house, where Harry relocates after his divorce and from which he centers the excremental family he crafts, "fucking stinks" when he first moves in (27). The family dog Tessie, left alone too long amidst the hubbub surrounding Jane's death, has performed "a kind of clean and purge" of the house by licking Jane's blood off the floor and then having diarrhea as a result (27). The imagery of the family dog, increasingly a symbol of Harry's growing affinity for closeness, "purging" the house of its previous broken mode of kinship by defecating on the bed, is consistent with Homes's use of excremental contact of all kinds to denote relational potentiality. Tessie reshapes the family home as fit for Harry, the uncle, to live in by removing the traces of blood relation and the violence they index and replacing them with the foul but promising signs of a new form of togetherness governed instead by contingency and openness.

Shitty smells are not the only way Homes draws people together in *May We Be Forgiven*. As the novel draws to a close, Homes stages a meeting between competing conceptions of kinship by having Nate and Ashley meet Avery, the recipient of their mother's donated heart and lungs. Consistent with Janet Carsten's work on the way that modern organ donation must complicate traditional views of kinship, Avery's curious state of relation to the kids is made explicit within the text. Nate and Ashley understand Avery as being both "just a lady from Ohio" who is "not related to us" as well as being "more like Mom than anyone, except us" (455). Nate's conclusion that Avery "can be whatever you want her to be" is consistent with Homes's depiction of alternative kinship as conditional and volitional (455). It is telling, moreover, that this reassurance does not draw the connection to Avery as being either genealogical, by dint of the bodily mass she inherited from her mother, or strictly non-genealogical. This is a form of kinship that vibrates in the gaps between the nuclear family and a circle of chosen associates.

For the purposes of this chapter, it must be noted that this organ donation is bound up in excremental language and imagery. Jane's father advocates for the donation so that "someone can have a good life even if hers turned to shit" (46), which suggests that this exchange of biological matter is prompted by an excremental turn. Harry, for his part, equates the harvesting of Jane's organs with the circulation of foodstuffs. He notices that the medical couriers transport the organs in Igloo coolers and imagines the food at Jane's shiva "suddenly . . . turn[ing] into body parts, organs: the Jell-O mold is like a liver; the macaroni salad, cranial matter" (45, 52). Under such circumstances, the kinship that develops from this type of bodily generosity gets cast as an inversion of the cycle of ingestion, such that their return in Avery's body much later in the novel may be understood in abject terms as the appearance of material now properly digested and transmitted from one body into another. The "whatever you want her to be" relationship of Avery to Nate and Ashley is thus permeated by an excremental mode of exchange whereby kinship circulates and becomes embodied as a process of ingestion and digestion.

Few of the lines of belonging Homes traces are handled at such a distance as Avery's. Actual contact with others' excrement and bathroom habits informs the majority of the kinship making practices in the novel. Harry hones his pseudo-parental relationship with his niece Ashley and nephew Nathan by helping them handle their shit. The pun here is vulgar, but in many cases I mean it literally, as when Ashley calls home from her boarding school for advice about her first period. In tears, Ashley explains that she "tried to use the Tampax" but "put it in the wrong hole" and cannot remove it (197). Harry's initial discomfort with the subject matter yields to a halting suggestion that his niece squat down and push, "like you're trying really hard to go to the bathroom" (198), which successfully expels the misplaced tampon, but introduces a predictable new problem: Ashley reports that she has now "pooped on the floor" of her

dormitory and "[i]t's disgusting" (198). Harry helps her clean up by imagining the mess as "a Tessie poop" rather than one of her own.

At each step of this process, Harry compares his niece's problem with an excretory memory of his own in order to recommend a solution. That this scatological advice is ultimately successful leaves him feeling "shaken, but, oddly, . . . like a rock star" (198). Homes, furthermore, casts Harry's fecal facsimile of parental advice as distinctly maternal, which reiterates the degree to which these excremental forms of intimacy transgress conventional modes of kinship. Ashley's call to her uncle begins with the repeated assertion that she "need[s] Mom," "need[s her] mom," and "need[s] to talk to Mom" despite her keen awareness of her mother's absence (196). When Harry asks how her friends have dealt with getting their first periods while away from home, she informs him that they all "talk to their moms or their older sisters" (196). The euphoria Harry describes as a result of having successfully approximated a mother figure for his niece makes clear the genuine power that these excremental lines of connection can have within the text, even when the relation thus constructed is at odds with the biological ties between the person involved.

Homes consistently appends excremental associations to these new lines of relation, suggesting some resemblance between handling waste and kinship connections. She offers Ashley as a focal point for this type of scatological relationality. Later in the novel, Ashley sends Harry a letter thanking him for a family vacation to colonial Williamsburg. Her personal stationery embossed with the initials A.S.S. for Ashley Sarah Silver, leading Harry to wonder "[w]hy didn't anyone think this might someday look odd when they named her – ASS?" (258). She signs the missive "Your friend – Ashley Silver" with a postscript reflecting on the difficulty of determining the proper way to signify their relationship: "P.S. I know you're not really my

'friend' but I didn't know what else to write – it seemed queer to write 'Love'" (258). I offer this letter, with ASS on the top and a reflection on the proper forms of relation on the bottom, as emblematic of Homes's excremental kinship writ large.

By locating her makeshift expression of closeness with her uncle in the space between platonic friendship and familial love, Ashley offers a tentative answer to the titular question posed in Judith Butler's "Is Kinship Always Already Heterosexual?" Butler's essay focuses on theorizing the family "when the relations that bind are no longer traced to heterosexual procreation" (39). While it is true that Harry and Ashley bear the traces of this heteronormative matrix of relation, as uncle and niece their relationship is difficult to square with the discourse of procreation that Butler opposes. Ashley's reluctance to sign her letters with love, which she presumably reserves for her closest family relations, positions the genealogical connections between the two as coincidental to the bond that forms between them. Ashley's letter, then, performs that "more radical social transformation" Butler traces from the refusal "to allow kinship to become reducible to 'family'" (40). Butler ends her essay by suggesting that the new forms of kinship she and others articulate will require fluidity in the way we engage with such questions of genealogy. Ashley's letter, marked by tenuous relations at the bottom and a telling blend of family identity and excremental reference at the top, effectively transcribes Butler's uncertainty regarding new forms of kinship that are not fully severed from the procreative discourse of the family.⁷⁵

The terminology appropriate to these excremental bonds presents a challenge to Harry as well. He struggles to find the right words to discuss Ashley's problem. He ultimately settles on

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⁷⁵ Thinking of excremental kinship as additional to genealogical kin, in the way my reading of Donna Haraway allows, is meant to be one way of alleviating this uncertainty, as it acknowledges the simultaneity of kinships, in much the same way that I advocate for a reading of excrement as capable of simultaneity in the Introduction.

"tush" because "ass," "butt," and "bung hole" are "all too crude" while "behind" is too imprecise, given that "everything we're talking about is behind" (197). This clumsy conclusion that it's all behind recalls the close association between excremental and menstruation in abject theory; that is, Harry's bumbling association of his niece's menstruation with excremental troubles recalls Kristeva's grouping of menstrual blood and excrement together under the category of corporeal waste. Though Kristeva distinguishes excrement as the symbol of external threats to the ego and menstrual blood as "the danger issuing from within the identity" (71), she nonetheless refers evenly to both bodily fluids for the symbolic way they "relate[] to a boundary" (69). Homes dramatizes the close relationship between the two by compounding Ashley's struggles with her first period with her accidental defecation. While stopping well short of fully equating one with the other, Homes does seem to posit some ways that relation can emerge from focusing on the mutual behindness of these two forms of bodily waste.

By situating this moment of relation-building as Ashley is, in her words, "going through some, um, changes. . . like, growing up" (196), Homes underscores the extent to which kinship emerges by mediating transitional moments together, and complicates this by showing how the liminality of shit provides a reasonable approximation of that same process of mediation. In addition to demarcating a boundary between inside and out, the experience of menstruation crosses a boundary between childhood and adolescence. The kinship Homes models is keyed to the way that connections form by crossing milestone boundaries together. The excrementalization of Ashley's period suggests a degree to which shit can approximate the community that emerges from weathering these developmental changes. As such, the scatological bond created here is not unique to Ashley's transition to adulthood. The novel's other ceremonies of kinship and growth take on a fecal hue as well.

Nate's Big BM, the family's byword for the boy's bar mitzvah celebration, is certainly the example par excellence in this regard. The abbreviation invokes bowel movements, as Harry reports that hearing it "gives [him] flashbacks to [his] mother asking, 'Did you make a nice BM?' 'I can't talk right now, I have to make a BM.' 'Are your BMs regular?' and so on..." (380). This scatological reference proves to be well-chosen, as the Big BM is explicitly antagonistic to traditional kinship; instead, Nate's transition to adulthood abides by the rules of excremental kinship and its principles of conditional, selective connections unbeholden to genealogical lineage. Nate proposes a service trip to Africa as an unorthodox bar mitzvah in part because he "wouldn't want to do anything that would bring the whole family together again. People talk about the nuclear family as the perfect family, but they don't say much about meltdown" (330). Homes's emphasis of the nuclear family as one non-ideal manifestation of family, presumably among many, reiterates her interest in proposing an alternate form of kinship that corrects for the excesses of the heteronormative nuclear family without wholly discarding its form. The form that his BM takes, as its name implies, pursues the perfect family that is not nuclear – that is, I have argued, excremental.

Homes's kinship, in closing, is excremental in logic as well as in act. In addition to forming when the people involved defecate or urinate, excremental kinship operates as a form of digestive character growth, by which necessary matter is absorbed and its unusable and unpalatable elements are expelled. Nate's Big BM places this second, more vital aspect of excremental kinship into sharp relief when Harry experiences one of the more spectacular bouts of incontinence in recent American literature. Lodisizwe, the family's African fixer

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⁷⁶ In what follows, I cite long passages of the novel in order to preserve the spectacular language Homes uses to describe Harry's transcendental bowel movement. My purpose in reproducing the selected passages at such length is to underscore that the transformative reading I propose does not selectively highlight or twist a few shitty moments in the text.

coordinating the events of the Big BM, diagnoses Harry with a spiritual injury and stresses that Harry

May feel okay right now, but you are not okay inside. You are holding something foul—
it needs to come out, and you are afraid to let it go. It is something from long ago; you
have kept it like a companion so you don't feel so alone, but now you have a family, and
in order to be healthy, it needs to come out. (417)

Londisizwe's appraisal is couched in the language of failed kinship. He notes that Harry has harbored this spiritual flaw out of a misplaced desire for companionship, which disrupts the healthy functioning of the new kin group he has now assembled around him.

Harry, notably, does not contest Londisizwe's appraisal, but instead notes that "there was always lived within [him] a rusty sense of disgust – a dull, brackish water that [he] suspect[s] is [his] soul" (418). The sense of disgust with which Harry approaches the brackish water inside him places this conversation squarely within the purview of scatology. This alignment is confirmed by Londisizwe's prescribed regimen of a four-day course of earthy teas, which will clear him out with "strong dreams and wind" (418). The wind Londisizwe promises is not a euphemism; as the village party celebrates Nate's BM with fireworks, Harry endures an explosive display of his own:

As the fireworks whistle and hum, crackle and bag, my stomach begins to rumble, flatus starring ancient archetypical gases, primitive evolutionary elements – carbon dioxide sulphur, methane, ammonia. Enormous bilious clouds that I imagine are colored blue and green and look like gigantic, unevenly formed iridescent soap bubbles rise up out of me, wobbling, expanding – exploding. Never as scatologically invested as some, I am impressed by what is coming out of me; at one point it feels timed to the fireworks. (420)

Leaving aside Harry's professed indifference to the excremental products he has highlighted throughout the narrative, his travails continue during a hike the following day, when he must "excuse [himself] and go into the woods. [He has] diarrhea and then move[s] to another spot and [has] more and then more" until finally his pants are "completely off and wrapped around [his] neck and shoulders as [he] involuntarily projectile-squirt[s] shit into the woods" (422). Harry drinks the final tea upon arrival back in America, greeted by an enormous "Congratulations on the Big BM" banner hanging on the house (433).

Harry emerges from this experience transformed with a new perspective defined by its attention to relationality. He reflects that "things don't have to be as they have always been" and that it now "seems pointless to go on for the sake of going on, if there isn't some larger idea, some sense of enhancing the lives of others" (436). It is no coincidence that he realizes his interwovenness with others through the eruptive experience he has had; Homes is careful throughout *May We Be Forgiven* to depict concern for others as always already wrapped up in the care of their excremental matters. It is in pursuit of new conditions of relation that Harry must expel his alienation and resistance to community, and it is in keeping with Homes's profound investment in the scatological logic of kinship that this expulsion must be so explosive.

And it is with this image of the explosiveness of the excremental relation in mind that I turn now, in closing, to *Geek Love*, where the tension between biological and excremental kinship reaches its climax in the fiery hellstorm that tears the Binewski family asunder.

Conclusion: Counting Heads and Asses in Geek Love

In *Geek Love*, Dunn takes advantage of the ambiguity surrounding the materiality and conditionality of kinship in order to craft a uniquely convoluted family drama. The novel follows

Olympia "Oly" Binewski, the hunchbacked, albino dwarf narrator, as she recalls the fantastic series of events leading to the fiery destruction of her family and their traveling carnival for her daughter Miranda. Questions of the specific nature of kinship lie at the heart of this novel. Binewski's Fabulon, the clan's traveling carnival, is a family affair in more senses than one. Oly's brother Arty, born with flippers instead of arms and legs, performs as Arturo the Aqua Boy. Her sisters Electra and Iphigenia are conjoined twins and accomplished pianists. Even the youngest son Chick, despite his outward appearance of "apparent normalcy" (8), wields hidden psychic powers. Chick's secret spells doom for the Binewski clan when, in a fury, he ignites an explosion with his mind to thwart Arty's cult of self-improvement through self-mutilation.

A sense of family identity drives Oly's narration from start to finish, as she attempts to relate the Binewskis' long history. Dunn's play with the conditions of family throughout the novel makes *Geek Love* a fitting place to close the reflection on kinship this chapter has undertaken. Daniel Punday cites Dunn's investigation into "the notion of family" as "perhaps the novel's most dramatic and controversial material" (818). Though shortly after this admission Punday pivots to focus on the performance of monstrosity in the novel, he is nevertheless unique among commentators on *Geek Love* in suggesting that our attention might rest on the form the family takes. My analysis remains keyed to the various forms of relation Dunn unites under the aegis of kinship, with particular emphasis on the reliably scatological means by which these connections are cultivated. Though the freak show at the heart of the novel purports to be a family affair, Dunn's reliance on excremental interaction among the Binewskis suggests clear limits to the ability of heredity alone to codify the experience of kin.

Dunn shifts back and forth between the family as a state of nature or a matter of design, which is strongly suggestive of the aporia kinship studies finds itself caught up in. Oly is

convinced of the deep genetic appeal of family. "What's bred in the bones, when you have bones, comes through," she insists (17). She cares for her mother Crystal Lil in secret out of respect for her mother's desire to insulate herself from the world following the accident, and though the explosion left Lil blinded, deafened, and addled, Oly maintains a careful distance out of fear of the chemical signals that unite mother to daughter; she worries that Lil "might harbor some decayed hormonal recognition of [her] rhythms that could penetrate even the wall of refusal her body has thrown up against the world" (12).

And yet the Binewskis' family business is not a matter of genetic accident. Al and Crystal Lil, the patriarch and matriarch of the family, do not leave their children's livelihood up to chance, but instead experiment with a cocktail of harmful materials, including "illicit and prescription drugs, insecticides, and eventually radioisotopes" (7), during Lil's pregnancies in order to assemble a generation of children grotesque enough to keep seats filled at the Fabulon. They realize that "children could be designed" (10), which challenges Oly's later claim that "a true freak cannot be made. A true freak must be born" (20). The family's constructed nature is further exemplified in the carnival's Mutant Mystery exhibit, a fifty-foot trailer featuring six twenty-gallon jars filled with formaldehyde and the bodies of six Binewski children who didn't survive long enough to perform at the Fabulon. N. Katherine Hayles calls these unsuccessful experiments the family's "Jar Kin" and suggests that their presence within the carnival is just one of several indicators of the family's "status as artifact and art object" (413). Dunn deploys the language of relation in her description of the gallery. Oly refers to the trailer as the "Binewski family shrine" (52). A sign bolted to the wall of the exhibit declares the bodies on display to be "BORN OF NORMAL PARENTS," a point Lil emphasizes to her surviving children privately by reminding them "that these are your brothers and sisters" (54).

Our attention is ever drawn not only to the exaggerated mutations that claimed these fetuses' and infants' lives, but also to the foregrounded efforts to expand the field of relation to include them in the practice as well as the substance of kinship. The sign assuring that the parentage of the Jar Kin is "NORMAL" enacts the type of discontinuity that Sedgwick attributes to the avuncular. To claim these bodies as family recognizes their genealogical line of descent, while at the same time their circulation as objects of curiosity trades on a sense of generational discontinuity. At the same time, as preserved corpses, the Jar Kin radically invert the heteronormative futurity that Edelman deposes in *No Future* and which Haraway challenges in her preference for kin, not babies. Not only are these preserved bodies inadequate to narratives of deferral of the present on their behalf, but as objects of spectacle their futurelessness is subordinated to the needs of the generation that precedes them. Thus while the grotesque spectacle of these preserved bodies is certain, their chemically-preserved presence also positions *Geek Love* as a response to the complications emerging from new technologies of conception and childbirth that inform the new kinship of the laboratory.⁷⁷

Dunn's play with the family epic stages a tension between modes of relation by blood and other ways of making kin. This, I maintain, has been a consistent element of the excremental kinship practices in all three works considered for this chapter, 78 but Dunn takes it a step further

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⁷⁷ Carsten's *After Kinship* is instructive here, particularly ch. 7. See also Kath Weston's and Charis Thompson's essays in Franklin and McKinnon's volume *Relative Values: Reconfiguring Kinship Studies*.

⁷⁸ It should be noted that there are other commonalities of plot and excremental thinking among these works that, for the sake of (relative) brevity, have been elided here. Iphy's care for Elly certainly recalls the connection Sadie Wearing makes between kinmaking practices and the nursing home environments of *May We Be Forgiven*. Dunn also includes a moment of milestone-related excremental kinship, similar to Dunn's equation of bar mitzvahs and bowel movements, when Iphy and Elly hide out in the carnival's toilet trailer during their first menstrual cycle, only for a storm to overturn the trailer and drench them in the effluvia it contains. Iphy and Elly's ultimate violent rending, as well as Chick's use of his sewer-like powers of connection to eradicate the Binewski family, similarly recall Baker's interest in grounding excremental kinship in its power to cleave apart as well as together.

by imagining heredity as a correlation of kinship rather than its causative factor.⁷⁹ Thus the Binewski family gives us multiple relational models in which kinship flows through the guts rather than veins in order to set up competing family narratives that are somehow parallel *and* interwoven. That is, excremental bonds of kinship both counter and construct the relational modes that circulate under the Binewski name, traditional, biological, and future-focused.

Nowhere is this more evident than in Oly's sisters Iphigenia and Electra, the conjoined twins whose "perfect upper bodies [are] joined at the waist and sharing one set of hips and legs" (8). The two are inseparable but distinct, with "separate hearts but a meshing bloodstream; separate stomachs but a common intestine" (51). As a result, the two experience a form of embodied communality that Oly struggles to find the proper vocabulary to represent. Oly remembers them as "peculiarly connected and unexpectedly separate" (51), and her mother rebukes her for deploying the singular to refer to the girls. The proper question, Crystal Lil reminds her, is never "Where *is* Elly and Iphy?" but rather "Where *are* they?" (51). This insistence on plurality, even in the face of perfectly inextricable material entanglement, suggests a limit to the power of substance to bring together. In this, the twins present what should be a physical impossibility: two entities sharing a single point in space.

This paradox of the plural singular is, like the girls' act, made possible by their joining at the guts. Indeed, through Iphy and Elly's common intestine Dunn depicts the convergence of individualism and mutuality that defines relationships properly formed. Moreover, I maintain that foregrounding the implicit scatology of their anatomy is not a matter of having a dirty hammer and finding filthy nails. Dunn uses the excremental implications of the girls' intestine to ground her description of the way they coinhabit the body they share. Elly, the bossier of the

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 $^{^{79}}$ Marshall Sahlins' assertion, in *What Kinship Is – And Is Not*, that "kinship is not given by birth as such, since human birth is not a pre-discursive fact" is instructive here (Ch. 1).

two, uses their bodily entanglement to assert a form of social control over Iphy by "eating food that disagreed with them. Iphy would sink into depressed silence, eating nothing. Elly's favorite trick was cheese. Iphy hated constipation like cancer" (52). The fact that Elly shares in the suffering she causes speaks to the impossibility of disentangling one member of a kinship relationship from another, and establishes that any definition of kinship as a form of mutuality must recast the infliction of pain on a loved one as a form of self-harm.

Iphy and Elly relate to one another as sisters and as coinhabitants of the same body, but also more. When Arty has Elly lobotomized to solidify his control over the carnival, their relationship takes on an additional caregiver-patient dynamic, as Iphy naturally accepts responsibility for her catatonic twin's care. Through Mumpo, the enormous son Iphy wanted and Elly didn't, the two also relate as mother and aunt, since they both consider Mumpo to be Iphy's, not theirs. When Elly ultimately kills Mumpo, and Iphy kills Elly in retribution, they further complicate their relation to one another. These pluralities of relation, sister-host-mother-aunt-murderer-widow, emerge suddenly and coexist with the other measures of mutuality in the twins' life without collapsing any, a complex web of relation that is better expressed in the fluidity of excrement than in the linearity of blood. And as the privileged site of symbiotic anatomy, the bowels are particularly well-chosen as the vehicle for this message of embodied sociality. The twins embody kinship's entanglement of substance and social practice, as their relationship is dictated in equal measure by their physical proximity and the interpersonal intimacy that emerges from that closeness.

Within the Binewski family, the twins serve as the clearest example of excremental entanglement as a barometer for closeness, but this scatological approach to intimacy is not limited to Iphy and Elly, nor is it only expressed in positive terms. Dunn also points to the

absence of shit as an indicator of kinship disrupted, as is made evident when Iphy and Elly give birth to their enormous son Mumpo, twenty-six pounds and five ounces at birth. Oly simply and explicitly "[doesn't] like" the monstrous baby (313), and Crystal Lil shares her distrust, admitting to Oly that "there's something about him [she] just can't like" (309). While the difficulty of accepting Mumpo into the family goes undiagnosed in the text, the implication is that his presence registers as problematic due to his disruption of the excremental dynamics of his mothers' relationship. Oly's most frequent complaint about his nephew revolves involves his gluttony, calling him "a bottomless craving" (301) and bemoaning that he is "eating the twins" (309). Iphy makes the excremental connection explicit when she worries that, despite all this feeding, her baby "only shits once every three days and then not much" (309). Mumpo's excessive consumption breaks from his mothers, who "ate a small fraction more than one norm kid their size" (51), while his dearth of excretion places him at odds with the general precept of excremental kinship to treat another's wastes as the foundation for closeness.

Even when Dunn deviates from explicit scatology, the language of excrement bubbles under the surface of the way she contemplates interconnection. Chick's great powers of mind, which enable him to manipulate objects psychokinetically, experience others' emotions as his own, and even sustain the spark of life in Oly's daughter in utero, make him preternaturally sensitive to the material experiences of those around him, such that he shrinks from psychic contact with dead matter, like the meat the family feeds the big cats that travel with them. This is Chick's great mutation, and it is positioned as the apotheosis for the type of ontological interweaving that Haraway celebrates in her various manifestations of oddkin. Material connection, Chick contends, is like water in that it "always wants to move but it can't unless we give it a hole, a pipe to go through. We can make it go any direction" (109). Chick's power is not

to incite objects into motion, but rather to give them a means through which to realize their preexisting proclivity to move. He is "just the plumbing that lets it flow through...But the *wanting*to move is in the thing itself" (109). Dunn, however, imagines the type of material affinity as an
infrastructural flow through channels undergirding the universe, leaving Chick's ability to
recognize the world as kin as a function of his role as ontological plumber. The fantastic powers
he wields as a result of his ability to let it flow seem to be, then, an expression of the potential
force excremental kinship can wield to bring together - and separate as well.

While Chick's fiery dissolution of the Binewski may be the most spectacular example of his powers in action in *Geek Love*, it is another use of his plumbing that better exemplifies the novel's interest in complicating kinship. Chick ensures the continuation of the family when Oly enlists his help to impregnate herself with Arty's sperm without his knowledge. Oly's daughter Miranda, then, is the product of incest, to which the study of kinship by blood has traditionally been opposed. Arty's relation to Miranda provokes the same type of reflection on the norms of relation between generations that Sedgwick ascribes to Wilde's avuncular. As Miranda's father, Arty directs our attention to the discourse of linear progression under which the Binewski family – indeed, the novel itself – appears to operate. But as her uncle, following Sedgwick, Arty suggests a perspective on the family tree that is more attentive to horizontal, rhizomatic connections between siblings. Viewed this way, the convoluted line of connection between Arty and Oly exceeds the reading of Chick's powers as plumbing I have offered here, as Oly's devotion to her brother most commonly manifests in her ministrations to his body and its nether regions. She is, after all,

the one who helped him with his shower after each show. I always soaped him and sponged him but he hated being tickled and he was particularly ticklish directly behind

his balls, so that was a spot we often missed. When the galloping green caught on in the tank it caught Arty by the balls and in the shady space behind them. I had to use a scrub brush to get the stuff off him. (208)

Oly's role as mother, then, originates in the shady space behind Arty's testicles, which initiates a profound reshuffling of the way Dunn asks us to understand not only her relation with her brother but with her daughter as well. Rather than deferring to the future in her daughter's name, Oly instead insists that "the only reason for [Miranda's] existing was as a tribute to your unclefather. You were meant to love him. I planned to teach you how to serve him and adore him" (309). Here the child is bound into service for the father rather than vice versa, which suggests the modes of kinship on offer in *Geek Love* may serve as an extreme example of a way to relate as kin without rendering some Other as unintelligible.

None of this is meant to suggest that the modes of relation that I am calling excremental kinship can fully supplant the family. Haraway's suggestion that oddkin works "in addition to" bloodkin keeps our attention on excremental kinship as a simultaneous mode of relation. That is, the excremental accompanies other forms of accompaniment, dwelling within the family as something Other inside, not unlike the gut flora that populate the intestinal tract and dominate our interest throughout this and other chapters. These contingent, semi-social, and future-averse modes of relation are always already wrapped up in the ways that togetherness is thought. An attentiveness to excrement, with its material conditions and social symbolisms, grounds our practices of kinship not in the joining of two singular subjects through their offspring but rather in plural affinities that are equally rooted in the familiar and the foreign. This is, as I have argued throughout this dissertation, precisely the perspective that a material scatology activates. In this light, shit bears the biological traces of the singular bodies that produce it while simultaneously

establishing those same bodies as multitudinous assemblages. Excremental kinship takes up the notion of relation after kinship, to borrow Carsten's evocative wording, by showing how every articulation of genealogy is intimately and inextricably wrapped up in the lines of relation with organisms of all kinds and through kinship objects of every aspect. The work of kin-making strikes a delicate balance between the recognition and mediation of material lines of connection across scales both minute and massive.

Geek Love makes clearest the role of excremental kinship as a constant counterpart to other material modes of relation and in recognition of this fact I want to end by returning to Iphy and Elly and the intestine shared between them. The girls' peculiar connection places them at odds with the prevailing mode of legibility within the Fabulon, namely the family identity that presumably draws them into kinship with the others. Oly reports that she "never knew the twins very well" (51), which she attributes to a form of inaccessibility and self-sufficiency that the other members of the clan do not share. Simply put, the twins "needed only each other" (51), which establishes their shared intestine, suitable as the symbol of excremental kinship, as a point of friction with the nuclear family that also lays claim to them as a pair. Oly gives voice to this friction in the closing pages of the novel, when she describes herself as "the third or fourth Binewski child, depending on whether you count heads or asses" (328). This polarity neatly describes the calculus involved in imagining relations by blood or guts, and gives name to the alternate way of thinking I have been after. To count kin by heads, as Dunn has it, is ultimately divisive, as it emphasizes the members involved as being separable from one another in a way that is untenable throughout the text. Throughout her childhood, Oly has been instructed to see the twins as only "they" and never "her," but through excremental kinship and the attention it prescribes to the common intestines we've seen, in various forms, in Homes, Baker, and now

Dunn, our attention rests on the plural that is always already at the heart of the singular. Thus, to count by their asses shows how kin emerges from an attention to shared materialities and the new conditions of social mutuality they engender.

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