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For Srinivas Aravamudan and Sir Eli Lauterpacht

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ABSTRACT

The Physiology of the Multitude: Mass Bodies and the Novel, 1748-1907

The Physiology of the Multitude addresses a paradox that played out over the eighteenth and nineteenth centuries around the British novel. During precisely the years when rational-choice economics and democratic liberalism both began to insist that individual free will would decide the political future, scientific vocabularies equally forcefully attributed action and decision to involuntary biological and social-systemic processes, rather than conscious choice. Over the course of the eighteenth and nineteenth centuries, natural sciences of the individuated body and social sciences of collectivity redefined the standards for what counted as realistic representations of human experience. As a result, fiction emerged as the field in which an increasingly mechanistic material body and deterministic forms of mass behavior could contest political, racial, and gendered fictions of why individuals behave as they do.

Focusing on fiction's unique formal ability to move between dramatically different scales, I show how novels in the years 1748-1907 combined the insights of scientific disciplines that were not otherwise in conversation with one another. Across a broad range of fiction, action and emotion get usurped from the conscious mind and are re-attributed either to the involuntary impulses of the nervous system, or to crowds and masses that seem to move, think, and feel as one. These novels introduce a model of non-volitional action that draws a connection between the body's unconscious biological processes and the mindless behavior of large-scale masses. The seemingly alien and often threatening features of the masses come to be lodged beneath the skin of the individual. At different points during these years, novelists seized on new ways of aligning evolving conceptions of the physical body with historically-specific kinds of masses.

Each of my chapters explains the conceptual tools novelists used to superimpose the category of involuntary behavior at the scale of the mass onto the category of involuntary behavior in the body. In the first chapter, Montesquieu's 1748 climate theory and Mary Shelley's 1818 *Frankenstein* explore the way a body whose biology contains the features of a population unsettled conventions of political theory and literary form. The second chapter reads Emily Brontë's 1847 *Wuthering Heights* alongside the emergent concept of the species to ask what new kinds of relations form among individuals when their bodies are understood to be composed of the same kind of flesh. The third chapter uses the physiological psychology popularized by George Eliot's life-partner, G.H. Lewes, to put Eliot's strange short work *The Lifted Veil* (1859) into conversation with *Daniel Deronda* (1876), arguing that Eliot points to the preconscious modes of thought that arise from the body as a way of navigating the chaos of crowd behavior and transforming anonymous encounters into meaningful relationships. The final chapter addresses globalism in late-century adventure and spy fiction; the "deep time" of Victorian geology in H. Rider Haggard's 1885 *King Solomon's Mines* and standardized Greenwich time in Joseph Conrad's 1907 *The Secret Agent* both work to embed individual bodies within planetary configurations of human life.

INTRODUCTION

What Lies Within: The Vital Matter of Mass Behavior

Towards the end of Bram Stoker's 1897 *Dracula*, Mina Harker and Dr. Van Helsing are caught unawares by nightfall when they are still far from shelter. Forced to draw a magic circle round themselves for protection, they brace for the onslaught of the vampires swirling around them, almost indistinguishable from the accumulating snow. The particular characters we've grown fond of stand inside a separate sphere that keeps the libidinal, hive-minded, and violent vampires out in the cold. To Dr. Van Helsing's horror, the purpose of his magic circle suddenly changes when the sun sinks and Mina loses her struggle to suppress the mind-altering effects of her own vampire bite. The circle now keeps Mina in, preventing her—a part of her that rebels against consciousness and overrides her own revulsion—from stepping out to add herself to the vampires' number. What is within and what is without become continuous with one another, as Mina is joined to the unified behavior of categorically abhorrent others—what I will be calling the mass—by the involuntary actions of a rebellious body. How the body acquired its capacities for rebellion and how the masses came to bear some relationship to what the body did when it rebelled is the subject of this dissertation.

Physiology and *multitude*: two terms that were the objects of increasingly scientific modes of inquiry over the eighteenth and nineteenth centuries, one naming the automated pulses of material processes taking place in the flesh, the other naming a set of commonalities unifying heterogeneity when human life is packed together at certain levels of density and volume. *Physiology*, which began as natural philosophy of the body in the eighteenth century and developed into anatomical biology by the end of the Victorian era, dealt with the organic processes animating particulate matter and the way they combine to produce consciousness.

Multitude was the epistemological product of many different discourses, which viewed its commonalities either as empirical phenomena observed in the aggregate—rates of birth and rates of death, at the most basic—or as abstract principles that sought to account for empirical phenomena, such as natural selection when used to explain universal anatomical features. Body and mass, physiology and multitude—both detach action from conscious choice and attribute it instead to natural or quasi-natural laws whose predictability and impersonality appear to overshoot the space of meaning in zooming in on a nervous system instead of indulging in the mind's psychology; or in transforming social totality and its forms of community into its mortality rates and fossil record.

The Physiology of the Multitude examines British fiction in the eighteenth and nineteenth centuries in relation to these two modes of talking about human life. By their very nature, novels work simultaneously at the scales of sensory experience and social totality, placing individuals within a space of overlap between physiological impulses and sociological pressures.[1] The body provides the somatic basis for life and the horizon for sensory experience; mass behavior provides the field of indistinction from which characters must distinguish themselves as particular yet also partially incorporate themselves into in order to achieve embedded belonging. I am interested in how the novel formulated that shared overlap between the two, in the face of the modern division of knowledge into specialized disciplines that rarely if ever crossed over the scales proper to their particular objects of knowledge to contest and combine insights. Phrenologists in the early Victorian era who linked the shape of the skull to emotions and intelligence, for instance, never needed to square their hypotheses with contemporaneous

[1] Georg Lukács's *The Theory of the Novel* (Cambridge, MA: MIT Press, 1971) is representative of a consensus among novel theorists that the novel gives form to the relationship between the inner life of the individual and modern social totality, in Lukács's view a relationship of alienation.

evolutionary science, which attributed the shape of the skull to a developmental history that in no way aligned with the developmental history of the emotions.[2] At different scales, the same actions could be ascribed to different causes, and human life received multiple epistemological formulations that implied different forms of relations between its individual constituents. The novels this study engages are interested in what it means to be subject to compulsions of the flesh and determinations of mass behavior at the same time, anwd whether political-theoretical models of personhood can be sustained in that situation.

I begin my account in the mid eighteenth century, when political economy had just begun to refine and amplify discussions of mass behavior, proceeding through the following century, an age dominated by species science and statistical sociology, and concluding with moments of a global imaginary at the end of the Victorian era shortly before the first world war would introduce new vocabulary and concerns surrounding mass experience. That progression takes place alongside the trajectory of physiology, which picks up steam around the same time when treatises such as Bernard Mandeville's on hysteria showed how the particulate matter underlying consciousness could occasionally go off the rails and act with a will of its own, or David Hume's argument that psychological accounts of sensation (the ideas they produce) must be supplemented with physiological accounts of how sensation-response relationships carve out cognitive channels of custom; on through early Victorian pseudo-sciences of character-as-matter and spiritualist appropriations of the flesh to explain the soul, prior to the rise and dominance of clinical physiology in the latter half of the nineteenth century. In attributing human behavior to

[2] As illustrated by Darwin's letters to Thomas Henry Huxley, contained in Cambridge University's *Darwin Correspondence Project*, and an occasional note to learned journals, Darwin was unreceptive to the work of phrenologists such as George Combe, yet confined his disagreement (and comparative unfamiliarity) with phrenology to private correspondence. See Darwin, Charles, "Influence of the form of the brain on the character of fowls," *The Field, the Farm, the Garden, the Country Gentleman's Newspaper*, 17, (May 1861): 383, and Darwin Correspondence Project, "Letter no. 3303," accessed on 30 April 2019, http://www.darwinproject.ac.uk/DCP-LETT-3303.

systems operating either within the body or at the level of the mass, both physiology and multitude exercised a determinative and at times even coercive force over an individual's conscious self-determination. At once the source of selfhood and of something more, of needs and impulses that threatened to burst forth in defiance of the will, the body throughout the history of physiology in these two centuries exhibited a tendency to produce action in excess of conscious intent. By contrast to contemporaneous political theory, which imagined that collectives formed when individuals freely elected to participate, the sciences of the multitude posited a denser mass of mankind, which labored, evolved, rioted, and consumed resources as a single entity. At times when we can detect the contours within literary characters of historically specific theories of embodiment and forms of mass behavior—so my argument goes—fiction generates new conceptual relationships between human life at different scales.

Outside fiction, a particular pattern of mental gymnastics was required in order to reconcile—or avoid having to reconcile—the way human life looked at radically different scales. When viewed microscopically, every part of the human body mechanically enacts a particular function; but at some intermediate scale those constituent parts combine to the point at which they must stop being mechanical and become conscious; and conscious, self-determining individuals at some scale of collectivity clearly collapse into patterns of uniform behavior that follow abstract principles that the individuals involved might not even understand, let alone elect to follow. Human life, at different degrees of particularity and abstraction, was mapped out by the sciences onto this gradient of scales. Novelists, in moving back and forth between scales, bent that gradient of scales into a Möbius strip, aligning the category of involuntary action in the body with the category of involuntary action associated with mass behavior. For it is my contention that fiction did not simply mediate between these non-literary discourses, but also

took on an active historical role in imagining the inner processes of the body in such a way that they crystallize out to particular forms of collectivity. It is an argument that works at three levels: the thematic study of body and mass as they appear in fiction; the formal ingenuity with which novelists moved back and forth across dramatically different scales; and the historical importance, in terms of political and economic significance, of establishing a correlation between mass behavior and the impulses that arise physiologically.

While it would be overly schematic to say that novelists crafted character strictly within this space of overlapping scales, it is true that many novelists regarded sciences of the body in particular as the standard for what counted as realistic representations of how interiority arose from sensations. In dealing with bodily matter that functioned something like raw code underlying sensory experience, novels of both centuries foreground what at first blush appears to be a purely organic, ideologically neutral body, a body that in critical theory has been regarded variously as the given basis for being in the world, and something unnamable that lies outside and beneath the space of meaning variously construed as the mind or the soul. As Fredric Jameson's discussion of literary realism indicates, the unnamable forms of feeling that seem to emanate from and disappear into the unrepresentable sense of bodily presentness has recently dominated critical consciousness and goes by the name *affect***.**

A scholarly consensus has emerged that affect, by contrast to individuated psychological states captured as emotions, arises from the body and animates the crowd.[3] But there has been no critical account of how that conjunction historically formed, or how political and economic systems call upon that conjunction and treat it as fact. In order to tell that story, this dissertation

[3] On the opposition of the named emotions to unnameable affect, see Fredric Jameson, "The Twin Sources of Realism: Affect, or, the Body's Present" in *Antinomies of Realism* (London: Verso, 2013), 27-44; for the collective animated by affect, see Jameson, *Antinomies*, 257.

is structured around four concepts that fiction adopted as new formal components of their imaginary worlds in the years 1748-1907: *climate*, *species*, *organic form*, and *standardized time*. Each acts as both a field of mass behavior and a much more intimate set of pressures within the body shaping its inner processes. In contrast to the social contract that created civil society through individual consent, eighteenth-century climate theory reached inside the body to arrange the somatic material underlying consciousness into uniform regional patterns. The function that accrues in fiction to the (pre-Darwinian) species is a haunting that occurs from within the body, which inherits asocial passions inherited from lives past, thus overcrowding the scene of solitude that was key to the mental autonomy of liberal personhood. Notions of organic form took the nervous system theorized by Victorian physiologists and imagined that point of universal commonality as the basis for crowd control. At the end of the Victorian era, the deep time of Victorian geology and standardized time both serve to synchronize actions within global populations. Each of these concepts organizes fictional populations by giving large-scale collective behavior a source in autonomic processes operating within the body.

The species is perhaps the most familiar of these, in the way *instinct* yokes the body's unmindful sensory responses to the health and shared behavior of the herd. But I do not want to concede fully what might seem like the obviousness of this example: for one, as we will see, this conjunction of a body's unreasoning impulses binding that body into coherent forms of collectivity predated the Darwinian species concept by more than a hundred years. We have to regard Darwin as a symptom rather than the source of this conjunction. For another, the instincts delineated by species scientists did not scale up to any recognizable form of social, political, or economic behavior; shaping instincts in such a way as to make that happen fell to the novelist's share.

In terms of the historical ramifications of the novels that do this work, I emphasize in each chapter the political importance inside and outside fiction of what bodies share with one another. The recalcitrant bodies and coercive collectives I have been discussing are among the most frequently cited obstacles to individual autonomy in discussions of social contract theory in the eighteenth century and liberal government in the nineteenth. Having each contributed (quite separately) to limiting the contexts in which a self-determining subject could seem like a reality, body and mass, when joined, offer an alternate vision of what it means to act politically. By this I mean that locating political behavior in the body's simple reflexes and natural desires offered a particularly effective solution at points during my historical narrative when the problem facing society was how to get supposedly cognitively deficient working-class and colonial populations to act coherently with the rest of the social body. As we will see, recruiting the biology of the body to the task of social cohesion was not only imagined to produce appropriately uniform behavior, but also threatened an affective excess that might arise from the too-immediate connections between bodies sharing an elemental composition.

The dynamics of bodies whose inner processes draw them into collectivity circulate throughout the years under consideration in this project. Daniel Defoe's *Journal of the Plague Year* (1722), for instance, uses the vulnerability of bodies to reshape social organization. The disease travels where goods are exchanged, where resources are shared, and where bodies come into contact—in making those networks of social connectivity visible, the plague sweeps across the boundaries of rank and region, asserting new economic principles over older social stratification.

Jonathan Swift, in his 1726 *Gulliver's Travels*, dramatizes the potential dissonances between physiological and sociological scales. The first two stops Gulliver makes are a miniature

society and a society of giants. The grotesque, magnified detail of gigantic bodies Gulliver finds forced on his perspective effectively zooms in to the scale of particulate organic matter, whereas, when he towers over the other society, the narrating perspective zooms out to the level of the social whole. At either scale, Gulliver can still talk to the inhabitants of each as conscious individuals, such that three scales are layered on top of one another, the physiological, the social, the sociological. The seemingly objective realities of human life at the scales of the body and social totality ironically impeach the postures of selfhood with which Swift's characters consciously engage their social surroundings.

If the unruly bodies of Swift's giants seem laughably out of step with the principles of social order Gulliver sees from above in the miniature society, then Edmund Burke's 1790 *Reflections on the Revolution in France* transforms that comic misalignment between organicism and abstraction into a matter of tragedy. Burke promotes, above all, the importance of attending to the concrete, in this case, the empty stomachs of a people whose hunger propelled them *en masse* to obtain for themselves what the abstract principles of the market and social hierarchy failed to deliver. By positing something that individuals share by virtue of their physical structure and offering a set of conditions that could turn that shared structure into collective action, the conjunction between body and mass reframed political and economic theory around topics of bodily vulnerability, natural proclivities, and biological need.

Charles Dickens' fictional rendition of the French Revolution in *A Tale of Two Cities* (1859) seeks to find the tipping point at which so many bodies animated by hunger becomes a political movement. Backing away, in this more conservative stage of his career, from the vision of a political order founded on collective action that arise from unconstrained impulse, Dickens appears to conclude that no such tipping point exists. A movement based on the assertion of

biological needs in this novel does not give rise to the ideas necessary for moderating competing needs nor to the organization necessary for producing the resources to meet those needs. Law and labor take place exclusively in England. Throughout the Victorian era, in fact, it was an open question whether the competitive instinct of the human species, formally enclosed within the individuated body, could be harnessed as a means of extracting organized labor from a population.

Problems of disorganization and, paradoxically, self-interestedness emerge in *A Tale of Two Cities* when individuals lose themselves in the crowd by embracing their embodied needs. Yet Dickens makes a great concession to what he clearly recognizes as the permanence of the crowd as a feature of social and political life when he updates the very form of character in the context of the French revolution. Known for doubling characters and dispersing an individual's psychology into physiognomy and surrounding objects, Dickens makes the unique move in *A Tale of Two Cities* of splitting of his leading man into two men who are nearly physically identical to one another: one an upright, principled hard-worker, the other a dissipated burnout (with a heart of gold). The one distinguishes himself from the masses, the other is swallowed up by them. Dickens appears to divide the individual into the fully realized and distinctive traits by which we know individuals in private, and the slightly degraded version bound up in mass behavior—one fully distinct individual and one whose distinctive features have worn a little smooth.

If belonging to a *mass* makes it necessary for Dickens to split his protagonist in two, for Robert Louis Stevenson it is the *body* that makes splitting necessary. In *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886), human biology exceeds the form of the individual. The base appetites that Dr. Jekyll chemically isolates and attempts to abject from himself are never more

capable of asserting themselves outside the control of consciousness than they are in this novel. Those problematic traits break off to form their own person: a person drawn to the sociologically degraded parts of the city, to the dens of vice; a person clearly marked with the signs and symbols of the Irish immigrant. The lower orders of cognition, the evolutionary inheritance of a pre-social age, and the impulses of pleasure—the designations Stevenson heaps on what the Hyde character bodies forth—get mapped onto certain pockets of the population and the immoral activity they get up to.

What the body produces the body can take away. Henry Mayhew's *London Labour and the London Poor* exemplifies a common way of thinking in Victorian reformist circles about collective action as the automated response of the human body to mass conditions. Mayhew urges his readers to recognize that the immoral behavior of the urban poor arises from a body that we all share being acted on by conditions that are simply worse than our own, leading him to "look with more pity and less anger on those who want the fortitude to resist their influence" (Mayhew 447). The behavior of the lowest strata of society emerges in his monumental documentary project as the unconstrained operations of embodiment that cultivated minds can more successfully manage. Accoringly, the "latent causes" of problematic urban behavior can be reduced to the natural response of bodies to their environments. Mayhew promises his readers an account of "the physics and economy of vice and crime," which will explain the wants and needs of the body respond hydraulically to systemic conditions like the availability of prostitutes or the unavailability of employment.

This dissertation project began as a study of theories of embodiment in the eighteenth and nineteenth centuries in relation to the individual posited by political theory, with the idea that fiction often externalized the involuntary inner processes of the flesh, those dimensions of

embodiment that exceeded consciousness, as impersonal forms of feeling and collective behavior operating uniformly across large numbers of bodies. It quickly became apparent, however, that this ripple of action and affect was always presented as the effect of a shared climate, or in the context of species-inheritance, or in response to a common set of sensations. Whereupon the project gradually shifted to address certain modes of aggregation that could reach inside the body and arrange its inner processes in such a way as to produce coherent forms of collectivity. In other words, it became an account of the relationship between body and mass in an era in which both body and mass became capable of action in their own right without the consent or awareness of the conscious mind. The category of involuntary action in fiction emerges as a space of overlap, a place where we discover the alien and often threatening features of the mass within us. As such, it is a space in which we experience new and ever more immediate connections to other bodies, often across lines of social division and among bodies that would not otherwise be joined. Even in texts that are provincial in setting and bound to national literary traditions, the body still tends to reflect what we can identify as features of populations larger in scope than the scope of the novel's setting. Sometimes the problem novelists address is how to get bodies to act in concert with one another, and at other times the problem is that they refuse not to.

Jacques Rancière calls attention to the way embodiment structures political and social community, thus, reciprocally, attaching political significance to the social structuration of the body's nonmindful processes. For Rancière, this means a "distribution of the sensible".[4] Political order, in other words, depends on settled meanings being attached to sensations. As Rancère discusses in his earlier work, political discourse can only effectuate political change when the

[4] Jacques Rancière, "Why Emma Bovary Had to Be Killed," *Critical Inquiry* 34 no. 2 (Winter 2008): 237.

"noise," or the parts of speech that we all collectively denude of meaning and relegate to the category of the unsayable, disrupts those parts of speech understood to communicate ideas. The way we all come into understandings of how to interpret one another's speech in such a way as to render it meaningful within a political moment is, in Rancière's argument, the deeper political structure, which remains untouched by debating ideas within a settled understanding of speech.[5] More recently, Rancière has widened the application of this notion of "the political" and applied it to bodies. As the source of raw sensations ("the sensible"), the body constitutes a potential source of disruption to settled political form. In the same way the noise must be managed to become speech, the immediacy of sensations threatens to disrupt the way a political society collectively assigns meanings to similar sensations. The forms that teach us how to process, parse, and edit sensation into consciousness (the space where we can either agree or disagree with someone else, within a settled set of terms) lie primarily in aesthetic experience, which therefore, in its power to create atomized sensations prior to being assembled into meaning, is also the site of potentially revolutionary disruptions to our shared ways of perceiving. Although Rancière does not explicitly acknowledge it, the structure of sensation he works with is one that received its first articulation in the physiology this dissertation concerns. In its essence, politics for Rancière lies in the time lag between sensation and ideation. The question of what the body got up to in that time lag has been a pressing concern since David Hume's 1739 discussion of custom (an embodied mode of thought that lets us reason on habit in order to keep up with sensations that come too quickly for reason to unfold), and receives what is probably its most detailed articulation in Victorian polymath Herbert Spencer's 1855 account of how we turn sensations into conscious meaning by classifying those sensations in terms of categories we

[5] See Rancière, *Disagreement: Politics and Philosophy* (Minneapolis: University of Minnesota Press, 1999).

acquire in common with other members of our society.[6] Rancière, however, risks naturalizing in his own thinking the body posited by Spencer and other physiologists at the time. Throughout this dissertation I avoid the language of "naturalizing," partially because the scientific discourses I engage were known for transforming received wisdom about nature, which makes the term somewhat misleading; and partially because the immediacy of sensation assumed across a range of theoretical registers has not been interrogated, especially, as I argue here, in light of the way the sensorial body was recruited to historically embedded forms of mass behavior.

Climate, *species*, *organic form*, and *standardized time* make visible the way novels take the features of abstract and transnational populations and cast them as integral to the physiology of the individual. Fiction gives historically specific content to historically specific forms of impulse, instinct, and machinic inner-workings taking place within the flesh. What each chapter seeks to reveal is that simply being a body—merely inhabiting the category of the given—meant already being constituted in historically specific ways for membership in key forms of collectivity.[7] When George Eliot, in her 1866 novel *Felix Holt*, has her protagonist arrested for a death caused by the sheer swell of a growing crowd he was attempting to disperse, Felix finds that, as one body contributing to the surge of bodies on the scene, he is unable through any act of will to extricate himself from certain kinds of belonging that operate at the level of embodiment. It is essentially this feature of embodiment that precipitates the mental breakdown John Stuart Mill chronicles in his 1873 *Autobiography*. At the very moment when Mill's theories of individual liberty and personal responsibility become unlivable in his own life, he writes, "I felt as if I was scientifically proved to be the helpless slave of antecedent circumstances; as if my

[6] See David Hume, *A Treatise of Human Nature*, ed. Peter Nidditch (Oxford: Clarendon, 2009), and Herbert Spencer, *The Principles of Psychology* (London: Longmans, 1855), 185-8.
[7] The notion of "the given" in the major works of twentieth-century phenomenology casts the body as a sensory interface with both itself and the world, a more or less transparent medium for experience.

character and that of all others had been formed for us by agencies beyond our control, and was wholly out of our own power."[8] Mill laments the decline of the mind's sovereignty over action and Gothically reports the presence of unfamiliar forces giving order to his mechanisms of thought.

Eric Santner has described the decline of sovereignty as a historical arc that transfers sovereignty from the king's royal body to the flesh of the popular body. The biopolitical narrative of modernity, Santner argues, is "the migration of the *royal* flesh…into the bodies and lives of the citizens of modern nation-states. This mutation calls to the scene the 'experts' charged with managing the sublime somatic substance of the new bearer of the principle of sovereignty."[9] While Santner outlines the psychoanalytic "agitations of the 'flesh' brought about by this shift," *The Physiology of the Multitude* addresses the way that power was extracted from the flesh of the popular body as forms of collective behavior. Theodor Adorno and Max Horkheimer, in their analysis of mass culture, argue that the power of the *demos* is essentially the "power" to be duped, swayed, or coerced—what they call "mass deception"—within a range of political and economic options.[10] What I wish to stress about climate theory, the species, organic form, and standardized time, by contrast, is that each incites action seemingly without the occasion of any choice. The very structure of deception replicates a situation where consent would otherwise be given or withheld, but seduces it instead. The power of novels that modify the categories of physiology in relation to action cannot entirely be reduced to a mechanism of the marketplace or a means of exploitation, in line with Adorno and Horkheimer. If orderly

[8] Mill identifies the source of his concerns in this passage with the doctrine of philosophical necessity, which, as I discuss in "What Climate Did to Consent," Shelley associates with climate's ability to enter the body through its sensibility and manipulate its finer forms of consciousness. See Mill, *'On Liberty' and Other Writings*, ed. Stefan Collini (Cambridge, 1989), 101-102.
[9] Eric Santner, *The Royal Remains: The People's Two Bodies and the Endgames of Sovereignty* (Chicago, 2011), 10.
[10] See Theodor Adorno and Max Horkheimer, "The Culture Industry as Mass Deception" in Adorno, *The Culture Industry: Selected Essays on Mass Culture*, ed. J.M. Bernstein (London: Routledge Classics, 2003), 120-67.

forms of mass behavior (organized around labor, opinion, mortality and birth rates, and consumer habits, to name but a few examples) were the life-blood of political and economic systems, the potential for disorder housed in the masses was a particularly potent cultural phobia, increased in potency by orders of magnitude following the French Revolution. As we will see, fiction could plant the seeds of discord within the flesh of its characters just as plentifully as it planted those of order.

Fueled by Foucault's powerful thesis that during the nineteenth century "the biological came under State control," literary criticism has maintained an unspoken adherence (at times anachronistic, at other times simply limiting) to the late-eighteenth-century writers from whom Foucault derived his ideas about sensation and collectivity.[11] According to Foucault, modern power split into two complementary components: discipline, or the regulation of individuated bodies; and biopower, or the behind-the-scenes management of a population's health. It is one of my aims in this dissertation to question the Foucauldian binary of discipline and biopower, founded as it is on an associationist psychological model imported from Jeremy Bentham's late eighteenth-century writing. By outlining, particularly in my fourth chapter, the way Victorian physiology diverged from and entirely supplanted associationist theories underpinning the panopticon writings, I present an account of the abstract nervous system posited by late-Victorian physiologists, which aspired to a kind of species universalism that made it the basis for systems of regulation directed more at incipient global culture than at the liberal state Foucault's argument applies to.

As Foucault explains, discipline "tries to rule a multiplicity of men to the extent that their multiplicity can and must be dissolved into individual bodies that can be kept under surveillance,

[11] Michel Foucault, *Society Must Be Defended: Lectures at the College de France, 1975-1976*, trans. David Macey (New York: Picador Press, 2003), 240.

trained, used, and, if need be, punished."[12] The power of surveillance to produce socialized subjects derives from Jeremy Bentham's late-eighteenth-century plan to reform criminals through punishment and reward, based on associationist psychology.[13] According to theories of associationism, as sense data gets taken in through the body, it is organized around two poles of feeling, pleasure and pain.[14] The unique configuration of experiences clustered around each pole over the course of a lifetime produces individual character and a sense of value, giving order to the way an individual thinks and feels. Associationist psychology, however, differs sharply from the iterations of the body I am interested in here, which centered on the automated behavior of the material processes underlying consciousness and the way the body can move into action independent of the will. Since first articulated by John Locke in 1690, associationism consistently spoke of sensations in terms of the way we consciously experience them and mobilize them as ideas and choices.[15]

As Rancière suggests, however, by the time sensations make their way into categories of experience like pleasure and pain, they have already been subordinated to the political forms that assign meaning to experience. In my first chapter, I identify *climate* as formulated in the eighteenth-century as one such form: discipline need not act on a body always already suffused by the forces of climate, which shape behavior in regionally specific ways by acting directly on the nerves, muscles, and blood that crystallize out to character. Nor could the surveillance of an individual body budge the structures of feeling elemental to human flesh that modify themselves only at the slow pace of evolutionary time.

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[12] Foucault, *Society*, 242.
[13] See Jeremy Bentham, *The Panopticon Writings*, ed. Miran Bozovic (London: Verso, 1995).
[14] On associationism and the divergence of later materialisms, see Rick Rylance, *Victorian Psychology and British Culture, 1850-1880* (New York: Oxford, 2000), 56-57.
[15] See John Locke, *An Essay Concerning Human Understanding*, ed. Peter Nidditch (Oxford, 2011).

When Foucault turns to biopower, he mobilizes T.R. Malthus's 1798 theory of a dangerous surplus population.[16] Biopower is the form of power that manages life itself by combatting disease, by allowing to die, by administering resources—all to achieve the desired balance between rates of birth and mortality, ensuring that the vital force of a population remains plentiful. It is the management, Foucault writes, of "a multiplicity of men, not to the extent that they are nothing more than their individual bodies, but to the extent that they form, on the contrary, a global mass that is affected by overall processes characteristics of birth, death, production, illness, and so on."[17] If discipline is what individuals have to practice in order to earn the right to life, then biopolitics is the management of resources necessary to sustain lives protected by the state at the expense of those subpopulations that, by failing in their discipline, forfeit the right to life and become disposable sources of labor. This "subrace," Foucault says, in falling short of the disciplinary standards for inclusion in the social body, gets figured as a threat to the social body due to the spread of disease, moral impurity, and the consumption of resources.[18] Foucault stresses that this excess of life pulling down the health of the rest is a division internal to the population, a classificatory move that "create[s] caesuras within the biological continuum addressed by biopower," between those lives that must be sustained and others that can be allowed to die.

Biopower, in short, is the management strategy that rises to meet the challenge of Malthus's surplus population, an excess of life generated by and within the social body, and which threatens the health of that social body by consuming food at a greater rate than it can be produced. Catherine Gallagher in *The Body Economic* similarly takes Malthus as the template for

[16] See Thomas Robert Malthus, *Essay on the Principle of Population*, ed. Geoffrey Gilbert (Oxford, 1999).
[17] Foucault, *Society*, 242-243.
[18] Foucault, *Society*, 61.

political economy in Britain for the entirety of the century to come. Her study applies Foucault's categories to the marketplace surrounding the production of fiction in the nineteenth century: she argues that political economy comprised two categories of value, which fiction had to juggle: *somaeconomics*, or the Benthamite calculation of pleasure and pain within the lives of individuals, and *bioeconomics*, or "the interconnections among populations, the food supply, modes of production and exchange, and their impact on life forms generally."[19] Consistent with Malthus's theory, Gallagher argues, the somaeconomic value attached to individual self-gratification was understood to impinge on bioeconomic value by threatening to overpopulate and overtax resources; and, vice-versa, the extraction of labor from the social body inevitably translated into suffering within the sphere of individual experience. As Gallagher's argument goes to show, the Foucauldian binary of discipline and biopower attaches incommensurable types of value to human life at different scales, effectively re-creating the assumptions of the specialized fields of knowledge that govern our understanding of reality at each scale. Biopolitics has dominated critical thinking about the relationship between individuated bodies and populations since the 1980s. What primarily differentiates my argument from that paradigm is the incommensurability Foucault inserts between those scales in order to explain the different forms of control directed at each: the disciplinary subject who, like the individual of social contract theory, agrees to regulate himself or herself in exchange for state protection; versus the purely biological life of the popular body.

By contrast, my area of focus here is on moments orchestrated by fiction when, by simply being a body, we inhabit both scales at once. The different reading this approach can take from Malthus helps illustrate my divergence. The behavior of mankind can be described, Malthus

[19] See Catherine Gallagher, *The Body Economic: Life, Death, and Sensation in Political Economy and the Victorian Novel* (Princeton, 2008), 3.

shows, in two ways: as a set of drives arising from the body, and as a set of rates measured at the level of the mass. What the two descriptive modes share is a kind of determinism or inevitability, which individual actors are severely curtailed in their ability to avert. When he makes "two postulata[:] First, That food is necessary to the existence of man [and] Secondly, That the passion between the sexes is necessary and will remain nearly in its present state," he makes it clear that reason alone has neither the power nor the motivation to check human nature.[20] Only conditions of immediate deprivation can restrain the sexual impulse. At the level of the mass, it is the relationship of one set of numbers to another that produces a necessary outcome: "Population, when unchecked, increases in a geometrical ratio. Subsistence increases only in an arithmetical ration. A slight acquaintance with numbers will show the immensity of the first power in comparison of the second."[21] The two scales reinforce each other throughout Malthus's essay, cross-referencing one another as though they constitute independent proof of the veracity of his analysis. He is at pains to show that good intentions and conscious decisions do not scale up from the scene of individuality to the mass: an individual's efforts to share his family's ample food with those in need or the decision to have fewer children merely redistributes food and children without affecting their systemic rate of production. Instead, it is through what Malthus calls "the fixed laws of our nature" that we as individuals participate in the rates of consumption and reproduction that constitute mass behavior.

The importance Malthus ascribes here to the automatic, unthinking dimensions of embodied behavior was a very effective tool for talking about mass behavior in terms capacious enough to include the supposedly reflexive, cognitively deficient tendencies of the lower classes. Indeed, Malthus implicitly equates the mass behavior he viewed as problematic (sex and eating)

[20] Malthus, *Essay*, 12.
[21] Malthus, *Essay*, 13.

with the lower classes, factoring out the good intentions of the "thinking classes" as negligible in the face of a system fueled by bodies acting on biological need. As my first chapter explains more fully, Malthus presents the view that certain kinds of action intrinsic to human nature may as well be measured as collective rates, which leads Mary Shelley to look to climate as a better way of managing the body than contract.

In each chapter I identify a historically new concept that some key novels adopted as formal components of their imaginary worlds. In each case, climate, the species, organic form, and standardized time served to correlate the automaticity of the body with the behavior of the mass. By contextualizing each of these formal components as concepts concurrently under discussion in political economic, scientific, and sociological discourses, I argue that novels consistently push these concepts further through their formal capacity to move back and forth between the scales that limit other fields of knowledge.

My first chapter, "What Climate Did to Consent, 1748-1818," reads the Romantic novel's aesthetic investment in climate in relation to conflicts between Enlightenment political theory and political economy in the eighteenth century. Mary Shelley's *Frankenstein* (1818) is framed around the fact of the material body as the source of subjectivity. From this perspective, we can see how Shelley recreates political economy's emphasis on the living body and stages it in relation to what I identify as the disembodying assumptions of social contract theory. If consent to a contract seeks to pin action to an individual's intent, *Frankenstein* drains action of intent by attributing it instead to a biological source within a body that is unwilling to conform to the terms of contractual agreement. In 1748, the Baron de Montesquieu argued in *The Spirit of the Laws* that climate addressed precisely this problem of how to make social coherence through the body. He explains why different populations behave as they do by way of a global system of

climates that penetrate the embodied interior to produce uniform patterns of embodiment in a given region. By conditioning the bodily matter underlying consciousness in such a way as to produce coherent collective behavior, climate effectively encloses the externalized features of a population beneath the skin of the individual. *Frankenstein* plays with this image of the body, embedding a mass of bodies within the creature's biology, which bulges and protrudes through the surface of the skin that can barely contain it within the form of individuality. On the one hand, Shelley pits the idea of the body as a source of collectivity against the form of the individual posited by the social contract; on the other hand, she uses the transnational travel that structures the narrative to show how different climates act on bodies to achieve civil society.

Montesquieu, however, offers little explanation of how discord or social dissensus could arise within the same region. It is on this point that *Frankenstein* pushes climate a conceptual step further. The novel's most extreme climates, literally outside civil society, unpack from the creature's body the darkest potentialities of the human flesh. On finding that same savagery mirrored by the normative communities that reject him each time he returns to climates where civil society flourishes, the creature exposes the violence underlying social order.

"The Body on the Moor," the second chapter, looks at the way the species concept in the early nineteenth century introduced affective relations among bodies that changed the way novelists thought about desire, solitude, and detachment. In Emily Brontë's 1847 *Wuthering Heights*, the depopulated Yorkshire moors show how the crowded conditions associated with the Victorian novel get relocated within an individual understood to inherit the remnants of past lives as passions and impulses of the flesh. The novel inherits a literary history of the pre-Darwinian species concept, which draws on the scientific work of Robert Chambers, Georges Cuvier, Jean-Baptiste Lamarck, and Richard Owen to imagine "the species" as a kind of elemental structure

within the flesh. In *Wuthering Heights*, this elemental structure takes the form of a melodrama of primordial passions often at odds with the constraints of social form. I locate the contours of that melodrama within the lives of Catherine and Heathcliff, who model affect at such a pitch of intensity that it tips over into the body as fever and spreads throughout the novel's collective flesh. Brontë spectacularly stages the idea that bodies are, first and foremost, composed of the same kind of flesh, which is what allows passions and actions from Catherine and Heathcliff's lives to haunt the rest of the narrative and reenact themselves on other bodies. Characters discover themselves crowded from within by the trace of lives past, and find themselves drawn as actors into a melodrama that principally concerns the convergence of sex and violence. Victorian anthropology understood the divergence of sex from violence as the origin point of civilized life, so the convergence of those terms in Brontë's novel reverses then-dominant ideas of history as progress.

George Eliot's career, as I argue in the third chapter, "Novels Precarious," is indexed by her evolving understanding of the relationship between the body as the source of sensory experience and the body as the object of sociological categorization. Her early essays on literary realism figure this relationship as an opposition between an individual's sensory interaction with a material environment versus emergent statistical sciences that, in quantifying popular behavior, detached actions from the immediate circumstances surrounding them. I read Eliot's final novel, *Daniel Deronda* (1876), through this lens: statisticians, in predicting future rates of action, made it simply a matter of probability which individuals would perform which actions. *Daniel Deronda* captures this logic in the gambling table, assembling crowds all equally subject to the laws of probability. The uniformity of action under statistics and the claims of sociologists to be able to predict future actions lead Eliot to represent crowd behavior as a single action abstracted

from any particular individual and applied uniformly to a large number of bodies. Action is thus imposed onto bodies from without, and the uniform ranks of a statistical public present an anonymous social sphere whose temporal intervals are too fast-paced for the kind of habit formation Eliot associates with character development in her essays. As a result, identity becomes suddenly precarious, as her characters have no basis for self except the sociological positions they occupy, which the logic of gambling threatens to strip away at any moment. The "Jewish question" in this novel offers only an uneasy narrative resolution, presenting a form of identity that is in-born and inalienable, yet only available to characters willing to leave the British social body altogether.

By pairing Eliot's early essays with her later fiction, I show how and why statistical sociology evolved as a concern for her; but by then turning to her strange 1860 novella *The Lifted Veil*, I argue that a technique for managing those concerns emerges from the way Eliot kept pace with and even outpaced developments in the physiological research conducted by her life partner, G.H. Lewes. *The Lifted Veil* dramatizes two categories of physiological cognition, conscious deliberation and the preconscious cognition, or the mode of thought that takes place directly in nerves that interpret and react to sensations before consciousness has time to exercise itself. As physiological research progressed, preconscious cognition gradually eclipsed habit formation as the defining feature of the body. Whereas Lewes operated under the assumption of the nervous system's individuality, Eliot's novella shows how a collective can form within the body's preconscious stages, as though networks of nerves extend throughout multiple bodies, plugging directly into the nerves of others. The collectivizing potential of the body's automated impulses, I argue, prefigures political-economic theories by Herbert Spencer and Walter Bagehot of a "social organism," or collective nervous system, that they used to make the heterogeneous

social body assembled by statistics more manageable.[22] Turning back to *Daniel Deronda*, I re-read its crowd scenes with the category of preconscious cognition in mind, arguing that this faster-paced mode of thought renders the scene of sociology livable by transforming the anonymous crowd into meaningful personal connections forged directly between bodies in their preconscious moments.

My final chapter, "Deep Time, Emergency Time, and the Late-Victorian Novel," looks at the role played by the body as novels at the end of the Victorian era opened up to a global scope. Pairing H. Rider Haggard's *King Solomon's Mines* (1885) with Joseph Conrad's *The Secret Agent* (1907), I argue that each novel imagines globalism by turning away from traditional fictional timescales that scholars have associated with temporalities of the nation-state: the sense of a "meanwhile" attending moments of conscious perception through which Benedict Anderson says novels embed us in a national population; and the timelines of cultural history Georg Lukács identifies with the formation of modern nations.[23] Haggard's novel turns away from cultural history to natural history, trapping his explorers within mines where the geological record asserts a kind of species-time that erodes the difference between European and African. In *The Secret Agent*, terrorists bent on destroying Greenwich Observatory (and with it the standardization of time itself) detonate a bomb whose explosion occurs too fast for consciousness to keep up, and unfolds instead on the timeline of preconscious cognition in the body. In each novel, these experimental timescales prove key to forms of global order: the human species, whose instincts and impulses are common to explorer and native alike; and a global population made coherent by the grid of standardized time, whose routines take hold of

[22] See Herbert Spencer, "The Social Organism" in *The Man Versus the State*, ed. Donald McRae (London: Penguin, 1969).
[23] See Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 2006) and Lukács, *The Historical Novel*, ed. Fredric Jameson (Nebraska, 1983).

bodies in their moments of preconscious mindlessness, synchronizing individuals into the schedules of organized life.

CHAPTER ONE

What Climate Did to Consent, 1748-1818

When Victor Frankenstein succeeds in chemically re-creating human life in Mary Shelley's 1818 *Frankenstein*, the monstrousness of his creation sounds a note of dissonance between materialist explanations of human subjectivity and contemporaneous socio-political expectations of what an individual is and how it works inside.[1] By giving individuated consciousness to the heap of bodies Victor stitches together as one, Shelley encloses a trace of the mass within the inner-workings of the body. The creature's "fibres, muscles, and veins" bulge through the surface of the skin, as though to advertise both that the human subject is nothing but this impersonal bodily matter, and that such a body disfigures the very form of individuality.[2] The "filthy mass" of bodies that Shelley embeds within the creature's biology ensures that Victor's re-creation of human life does not merely give human subjectivity a new source in muscles and nerves, but also questions the degree to which the actions, thoughts, and feelings that arise from impersonal somatic equipment can truly be said to be one's own (Shelley 121).

Criticism devoted to *Frankenstein* forms a body of scholarship almost as vast and heterogeneous and the creature's body, an observation that has itself become a critical

[1] Recent scholarship has tracked metaphors of the liberal "social body" or "body politic" through eighteenth-century philosophy concerned with the body; *Frankenstein*, however, seems to determined to turn the body posited by materialist discourses against the dominant assumption among political theorists that collectivity forms when individuals consent to a social contract. For histories of science that stress this nation-state metaphor, see Jess Keiser, "Enlightenment Neurology and the Personified Mind," *English Literary History* 82, no. 4 (2015): 1073-1108, and G.S. Rousseau, *Nervous Acts: Essays on Literature, Culture, and Sensibility* (London: Palgrave Macmillan, 2004). For a discussion of "the potency of this republican metaphor" see Robert J. Richards, *The Romantic Conception of Life: Science and Philosophy in the Age of Goethe* (Chicago, 2002), 259-261.

[2] Mary Shelley, *Frankenstein*, 1818 text, ed. Marilyn Butler (Oxford, 2008), 35. Further references are cited parenthetically.

commonplace, even leading some to try to account psychoanalytically for why a single text attracts so many interpretations.[3] My aim is not to join in explaining this interpretive fertility, but to argue for an unseen relationship between two aspects of the novel virtually every reader acknowledges: *Frankenstein*'s extreme climates and broken contracts. The former gets emphasized by genre-studies placing the novel within Gothic romance (which turn climate into symbolic landscapes), while the latter fuels readings of the novel as commentary on political theory (which allegorically transmute fiction into history). Climate and contracts form two poles in the critical conversation, which has allowed the political history of climate to go overlooked. The central figure in Enlightenment discussions of climate was the Baron de Montesquieu, whose *Spirit of the Laws* (1748) argued that a global system of climates assembled individuals into populations without any need for their consent. His explanation of climate's political power rests on a materialist understanding of subjectivity, such that material environments could shape the biological processes that produce consciousness. Individuals' thoughts, feelings, and actions were thus internally choreographed into coherent collectivity. This essay explores the relationship between Montesquieu's materialism and Victor's bio-chemical replica of human life, arguing that both disfigure the contractual subject posited by Enlightenment philosophy in the same way. By locating subjectivity in the disobedient, impulsive, and impassioned flesh that Victor shapes into an individual, *Frankenstein* tests the resources of both climate theory and

[3] See Marshall Brown, "*Frankenstein*: A Child's Tale," *NOVEL: A Forum on Fiction* 36, no. 2 (2003): 145-175, which adjudicates different critical assumptions about what makes the novel unique. Brown's conclusion that it is "the prescient if unthematized intuition of early experience" (145) has been recognized by others who discuss nascent consciousness in more historical terms unlike Brown's formalist reading (see Nancy Yousef, "The Monster in a Dark Room: *Frankenstein*, Feminism, and Philosophy," *MLQ* 63, no. 2 (2002): 197-226). I also address these earliest moments of experience but urge a heightened sensitivity to why we cast that Lockean narrative as natural. On psychoanalytic accounts of the novel's unknowability, see Anne Mellor, "*Frankenstein* and the Sublime," in *Approaches to Teaching Shelley's* Frankenstein, ed. Stephen Behrendt and Anne Mellor (New York: MLA Publications, 1990): 99-104, which is representative of how resisting the temptation to allegorize the novel's message can allegorize the creature as a figure for interpreting the novel.

social contract theory in searching out the social glue necessary for managing the body's inner processes and incorporating them into social cohesion.

Climate, according to Montesquieu, offered an explanation for why different populations behaved as they did: by arranging nerve fibers, muscle tissues, and blood composition into uniform patterns within a region, climate assembled people through the body into collective practices and mass dispositions. Temperature, terrain, and atmospheric rates of fluid evaporation acted on the physiological springs of personhood to standardize the way the inhabitants of a region took in and responded to sensations. In this respect, climate performs what Jacques Rancière identifies as the foundation for any political system: "a way of framing, among sensory data, a specific sphere of experience…a partition of the sensible."[4] By shaping the somatic apparatus underlying consciousness, climate guided individuals into forms of mass behavior antecedent to any conscious decision to participate. Montesquieu translated mass behavior into biological terms, thus enclosing the exteriorized features of a population beneath the skin of the individual.

In *Frankenstein*, this image of a body whose inner-workings contain a trace of the mass is rendered monstrous, the source of social disruption rather than the key to social cohesion.[5] Many bodies stitched together comprise the "fibres, muscles, and veins" of the creature Victor brings to life. Shelley causes that biology to bulge through the skin, as though to advertise bodily matter as the seat of subjectivity. Such a body supplants the mind as the source of action, attributing it instead to impersonal somatic equipment that appears to belong more to the masses that share

[4] Jacques Rancière, "The Politics of Literature," *SubStance* 33, no. 1 (2004): 10.
[5] Shelley's familiarity with Montesquieu's writing by way of his Orientalist novel, *The Persian Letters*, has been documented by Joseph Lew, "The Plague of Imperial Desire: Montesquieu, Gibbon, Brougham, and Mary Shelley's *The Last Man*," in *Romanticism and Colonialism: Writing and Empire, 1780-1830*, ed. Timothy Fulford and Peter Kitson (Cambridge UP, 1998). Lew suggests Shelley was familiar with *Spirit of the Laws*, based on conversations with William Hazlitt noted in her journals.

that equipment than to the "self" seated within it. Victor climactically tears up the contract he struck with the creature when he realizes that the impulses of that body cannot be contained by the cognitive self-government on which contractual form depends.[6] In both *Spirit of the Laws* and *Frankenstein*, the unconscious inner processes of the body are inherently collectivized, the basis for mass behavior that does not originate in or abide by a social contract.

Social contract theory, by contrast, posits a mind that regulates the body's behavior, performing only those actions to which it consents. Nancy Armstrong's *Desire and Domestic Fiction* has, for thirty years, steered critics towards the belief that the eighteenth-century novel authored an interiorized individual who could and would consent to the kind of contract Enlightenment political theory imagined as the foundation of the nation-state. For this reason, a novel like Samuel Richardson's *Pamela* (1740) repeatedly thwarts an attempted rape in which male sexual desire keeps migrating away from Pamela's body, which can be mastered through force, and fixing instead on her mind: "Mr. B's attempt to penetrate a servant girl's material body magically transforms that body into one of language and emotion, into a metaphysical object that can be acquired only through her consent."[7] Armstrong's readings reveal an unspoken premise of contractual theory: the evaporation of the body into language that stands in as the content of the mind. Throughout the eighteenth-century archive, the body makes the mind vulnerable not only to external coercions of force, but also to more insidious coercions urged by the embodied passions, and to environmental pressures internalized physiologically as habit that allow pre-existing social practices to inflect the moment of consent. To sustain the belief that

[6] See Maureen McLane, *Romanticism and the Human Sciences* (Cambridge, 2000), which illuminates the Malthusian logic Victor uses in reasoning that the creature's embodied desires cannot be ruled by contract. Although McLane attributes this logic to Victor's flawed reasoning, what seems more significant is that Shelley stresses its incompatibility with contractual government.
[7] Nancy Armstrong, *Desire and Domestic Fiction*, (Oxford, 1987): 5-6.

individuals act solely on conscious intent, the body has to be factored out of the thinking process and made to disappear.

This essay begins with Jean-Jacques Rousseau's *On the Social Contract* (1762) to explain why the cognitive procedures associated with consent depended on silencing embodied impulses. Brief discussion of Richardson's *Clarissa* (1748) and Henry Fielding's *Tom Jones* (1749) illustrate the way fiction regarded the material body as a source of disruption to contractual obligation. I then turn to *Frankenstein* to show how Shelley yokes that unruliness of the flesh to problematic forms of mass behavior, which contractual form fails to return to the province of individual self-government. Montesquieu, however, proposes that very conjunction between the physiology of the individual and mass behavior as an alternate means of rendering populations coherent through climate. I turn back to *Frankenstein* to show how Shelley turns Montesquieu's use of climate inside out. *Frankenstein* imagines extreme climates where human life is too precarious for organized society to form; on such terrain, the only available relations are those of hostility whose violence cannot be contained by contractual form.

Shelley uses extreme climates to unpack from the creature's body the darkest potentialities of human flesh, but then sends the creature back into temperate climates where civil society flourishes only to find those same potentialities mirrored in the characters who violently reject the creature.[8] His appearance haunts civil society with the potentialities of the flesh that would disrupt the cognitive self-government fostered by the pacific climates of northern Europe. The creature's mismatched body and disproportionate scale make him a figure for the incommensurability among climates and their respective sensibilities, which contracts

[8] This line of argument is indebted to Melinda Cooper, *Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era* (Seattle: University of Washington Press, 2008), which discusses what twentieth-century biologists call "extremophiles," or organisms that re-define the prevailing concept of life by adapting to environments ordinarily considered inhospitable to life.

cannot repair. David Bates has shown that Enlightenment political theory implies a state monopoly on force that can enforce within political society the rights individuals were imagined to acquire through the social contract; in *Frankenstein*, the creature's appearance makes those relations of force lying submerged beneath contractual society appear on its surface.[9]

Bringing Montesquieu's climate thesis into the fold of literary history introduces a way of relating the scale of population management to the scale of the individuated body that is very different from the dominant models critics have formulated. Catherine Gallagher has argued that late eighteenth-century fiction began juggling two theories of value, one based on the vital force of laboring populations, and another based on the emotional and sensory experience of individuals.[10] Gallagher's political economists emphasized that gratifying the desires of individuals threatened the health of the population, rendering these two modes of value contradictory. Her argument inserts a scalar disjunction between the scene of first-person experience and systems operating at the level of population. This disjunction between scales marks nearly all scholarship indebted to Michel Foucault's biopolitics, which splits political power into the disciplinary enforcement of individual bodies to produce a self-governing mind, on the one hand, and the administration of resources at the level of the population, on the other.[11] Foucault ontologically disconnects the scene of individuality, in which the mind polices the body so that it adheres to the terms of a social contract, from the scale at which the population acts as a single entity.

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[9] David Bates, in *States of War: Enlightenment Origins of the Political* (New York: Columbia, 2012): 216.
[10] Catherine Gallagher, *The Body Economic: Life, Death, and Sensation in Political Economy and the Victorian Novel* (Princeton, 2008).
[11] This relationship between scales in Foucault's work first appears in *The History of Sexuality*, vol. 1, trans. Robert Hurley (NY: Vintage Books, 1990) and later becomes the focus of *Security, Territory, Population: Lectures at the Collège de France, 1977-78*, ed. Michel Senellart (New York: Palgrave Macmillan, 2009).

The Mobius-strip logic by which Montesquieu makes the embodied interior the space of mass behavior allows Shelley to bring these scales together, reconceptualizing the alien and often threatening behaviors of the mass as potentialities of the flesh that individuals had to confront within themselves. In what follows, I concentrate on the new dynamics such a body introduced into the repertoire of first-person experience, as bodies become interchangeable with one another and capable of acting outside consciousness. By contrast to the purely intentional, consciously-motivated action encoded in the act of consent, these features of the flesh begin to outline a new model of action that is anonymous and non-volitional, the product simultaneously of the unconscious inner-workings of the body and the mindless behavior of the mass. Climate steps in to give order to these two categories of action—bodily impulses and the pressures of mass behavior—that social contract theory had designated chaotic and hostile to an individual's freedom to act solely on his or her consent.

Conditions of Consent

The rhetoric of liberty surrounding issues of consent from the eighteenth century to the present underscores what I view as the most important function of the contract as a political-theoretical concept. As a stamp of validity affirming that an action was not coerced, consent provides proof of an individual's conscious intent and thus marks the difference between sexual intercourse and rape, between democratic elections and voter intimidation. By keeping an individual's will distinct from the pressures of other wills, consent implies a certain structure of action that originates within the individual and arises as an expression of consciousness. When the cognitive act of consent has not been explicitly performed to certify those actions were the product of a deliberate decision, then categories of violation, coercion, and oppression coalesce around sexual acts performed on a body without its owner's consent, and around votes elicited

that are not in accord with the voter's actual wishes. When Rousseau frames membership in a state as consent to a social contract, he attributes the mass behavior that constitutes civil society to that model as well: to the conscious intent of individuals who freely elect to participate.

As the meeting point between an individual's will and the behavior of a population, the act of consent in Rousseau's essay serves as a way of collectivizing individual actions through a shared agreement to recognize bonds and legal obligations, while still giving action a source in individuated interiority. In order to portray all action in terms of individual will, Rousseau works to equate both the structural determinations of large populations, on the one hand, and compulsions arising from the body, on the other hand, with infringements on the liberty of that will. He argues that as a population increases in size, personal liberty is attenuated as an individual's share in the general will decreases mathematically from, say, one ten-thousandth to one hundred-thousandth. "The less relation the particular wills have to the general will…the more should the repressive force [of government] be increased" to prevent corporate or group interests from filling the power vacuum left as the rights of individual citizens are weakened.[12] As the mathematical value of the individual will decreases in relation to population size, sub-groups form within the population to consolidate shared interests and assert those interests more forcefully. So long as there are many small groups, Rousseau suggests, the sum of small differences among groups is still a relatively general will. But when a few large groups begin to dominate, the sum of differences between views is closer to a few particular interests. By buying into the interests represented by a group, individuals gain back the influence that their personal interests had lost, but in doing so they no longer conform to the premise of contractual consent

[12] Jean-Jacques Rousseau, *On the Social Contract*, trans. G.D.H. Cole (New York: Dover Publications, 2003): 39.

that "each citizen should think his own thoughts."[13] Large interest groups that take up the slack from weakened individual wills threaten to usurp the faculty of will from the individual.

These conditions of excessive population growth are not alone in putting the power of will at risk: the mode of thought produced by the body threatens to eradicate the faculty of will altogether, or at least to limit it to the non-mindful compulsions of bodily necessity. Rousseau dismissed any behavior rendered automatic and necessary by human nature as "slavery [to] the mere impulse of appetite." The social contract proves crucial here, as contractual obligation substitutes itself for primitive appetite: "only when the voice of duty takes the place of physical impulses and right of appetite, does man…find that he is forced to act on different principles, and to consult his reason before listening to his inclinations."[14] Rousseau thus brings the scale of large numbers and the scale of the physical body together in a kind of negative dialectic, linking these categories in a shared antagonism to the cognitive procedures he associates with membership in civil society.

Since few historians in the eighteenth century regarded the social contract as a real historical event, scholars have often asked why Rousseau enshrined that particular fiction as the origin of civil society.[15] When viewed as a way of preserving the individual will as the basic unit of popular behavior, however, it is clear that Rousseau seizes on this pinpoint moment at which mankind transcends the state of nature because it offers the only way of imaginatively liberating mankind from the pressures of population and of body all at once. The myth of an original social contract offers precisely the conditions under which consent could serve as the paradigm for all

[13] Rousseau, *Social Contract*, 18.
[14] Rousseau, *Social Contract*, 12.
[15] Carl Schmitt, in *Political Romanticism*, trans. Guy Oakes (Cambridge, MA: MIT Press, 1986), identifies Rousseau's genre of choice for civil society's origin story as the "romantic fable" (2). See also Fredric Jameson, "Rousseau and Contradiction," *SAQ* 104, no. 4 (2005): 693-706.

behavior. Only through this Romantic fantasy of a time when individuals roamed free without being bound to one another could actions truly be regarded as autonomous; only at the moment when mankind developed the "ennobled" and "uplifted" feelings that made them wish to escape the nasty business of embodied necessity could the faculty of will express reason rather than need.[16]

Literary criticism has generally understood the eighteenth-century novel to make these cognitive procedures the basis for character. Since the 1980s, critics have emphasized the problem of making one mind intelligible to others, and the prominent place of romantic desire within this body of fiction has cast sexual consent as the site of the novel's success or failure to make interiority publicly legible.[17] Jonathan Kramnick argues that the early novel narrates the process by which "internal deliberations feed into acts of consent," and that consent shows what interiority looks like by externalizing states of mind in actions and speech: "In order to know whether someone has consented, one must understand what someone is thinking, and in order [to] get a sense of what someone is thinking, one needs to examine closely what someone is doing."[18] While Kramnick takes it as common sense that "thoughts move into actions," he might as well have reversed that process and considered the possibility that novels project thoughts backwards from actions, as part of the cultural process that naturalized that very piece of common sense.[19] Critics, however, tend to agree that fiction transmutes mental states into action

[16] Rousseau, *Social Contract*, 12.
[17] This trend can be measured in terms of the sustained influence of Frances Ferguson's "Rape and the Rise of the Novel," *Representations* 20 (1987): 88-112, which argues that eighteenth-century novels achieved psychological complexity in characters by dramatizing the potential dissonance between readers' sense of what a character *would* consent to, on the one hand, and the mental states that laws surrounding rape superimpose onto the parties involved in order to simplify questions of intent, on the other hand.
[18] Jonathan Kramnick, *Actions and Objects from Hobbes to Richardson* (Palo Alto: Stanford UP, 2010): 169.
[19] Tzvetan Todorov discusses novelistic character as a cluster of verbs—rather than an *a priori* subject named by a proper noun—with the perceived motivations for those actions only imposed retrospectively. See Todorov, *The Poetics of Prose*, trans. Richard Howard (Ithaca: Cornell, 1978).

so that relative moral worth can be assigned to those mental states in the open.[20] This would allow, through the medium of public writing, novels to bring potentially eccentric and atomized minds of individuals into social harmony by placing them all within one moral framework. By making consent integral to the structure of action, critics have cast novels as instruments of liberalism, in that they attach action to individual intent and imagine collectivity as a union of minds synthesized through discourse.

Recent theoretical interest in nonhuman agency and unconscious cognition, however, makes it increasingly apparent that the actions we actually consent to perform are of a very specific kind, and that some dimensions of political life cannot be assimilated to that model.[21] In the last decade, scholars across disciplines have pointed to headless figures of "the multitude"—distinguished from Rousseauvian collectivity in that the behavior of the multitude threatens to override, rather than amalgamate, the will of those who belong to it—as an alternate form of social organization.[22] As a way in which bodies move independently of the mind, the multitude constitutes a mode of action that is non-consensual without being coercive in the sense that non-consensual sexual or electoral acts would be. Political economists in the eighteenth century began to acknowledge forces such as war, commerce, climate, and disease that made individual self-government give way to regional patterns of behavior.[23] What scholars call the multitude is an organizational principle that asserts itself over large numbers of bodies in defiance of the

[20] See Margaret Anne Doody, *A Natural Passion* (Oxford, 1974); Armstrong, *Desire*; and Thomas Keymer, *Richardson's* Clarissa *and the Eighteenth-Century Reader* (Cambridge, 1992).
[21] See N. Katherine Hayles' *Unthought: The Power of the Cognitive Nonconscious* (Chicago, 2017), as a compelling example of recent scholarship that takes non-human forms of cognition as a model for the bulk of the thinking that occurs in the brain.
[22] See Étienne Balibar, *Masses, Classes, Ideas* (London: Routledge, 1994); Warren Montag, *Bodies, Masses, Power* (London: Verso, 2000); and Nancy Armstrong and Leonard Tennenhouse, "Sovereignty and the Form of Formlessness," *differences* 20, no. 2-3 (2009): 148-178.
[23] Bernard Mandeville's 1714 *Fable of the Bees*, ed. Phillip Harth (London: Penguin, 1989) is but the most famous example of emergent thinking that reconceptualized socio-economic practices as part of an organic system that functioned according to autonomic natural laws.

moral codes that govern individual judgment. But it has been less than apparent how this organizational principle takes hold of bodies whose owners experience at least an illusion of conscious self-determination.

When David Hume made the case in 1748 that the social contract never took place, he instead attributed the coordinated behavior of populations to the dictates of instinct located in a universalized human body. The collective practices Hume identifies as the core obligations of civil society are "those to which men are impelled by a natural instinct, independent of all ideas of obligation, and of all views, either to public or private utility."[24] Hume recuperates the mode of thought produced by the body as the shared basis for social behavior, rather than something pre-social that enslaves the mind to primitive needs. State force prevents these natural drives from coming into conflict over resources and property, since mankind "could not live at all in society, at least in a civilized society, without laws and magistrates and judges, to prevent the encroachments of the strong upon the weak, of the violent upon the just and equitable."[25] State monopoly on force, in Hume's thinking, is necessary because individuals still operate within a state of nature preserved in the body.

Although criticism has largely equated the rise of the novel with an individual whose happiness depended on his or her freedom to grant or withhold consent, mid-century fiction registered the presence of a body whose impulses and susceptibilities posed a problem to the very form of contractual agreement. Samuel Richardson's *Clarissa* (1748) dramatized the way such a body spelled the death of a particular kind of character. When Clarissa's pursuer ultimately succeeds in his repeated attempts to rape her, Richardson departs from his established pattern of representing successful resistance to sexual aggression simply through a heroine's

[24] David Hume, "Of the Original Contract," in *Political Essays* ed. Knud Haakonssen (Cambridge, 1994): 201.
[25] Hume, "Original Contract," 197.

strict mental discipline over her own behavior. In doing so, he disrupts the correspondence between interiority and action that Kramnick ascribes to novelistic character. Robbed of her mind's sovereignty over her actions, Clarissa's consciousness is thrown first into madness and then death, as it quickly evacuates the body that has been forced into actions incompatible with those that define her intention. Thanks to the continuing influence of Bakhtinian narrative theory on studies of the early novel, critics have retained a formula for character as constellations of actions and speech grouped under a name, which creates the illusion of a psychology behind those actions that motivates them, but that also exceeds them and is not exhausted by them.[26] As *Clarissa* goes to show, this correspondence between action and interiority cannot accommodate the impersonal forms of action proposed by political economists, which impose themselves on bodies without consent. If Clarissa ceases to be Clarissa when deeds alien to her volition are forcibly added to the archive of actions that comprises her, what happens to character when political economy started to make non-volitional action a standard part of social and economic life?

This vulnerability of the body to conscription by force was part of a larger softening of consent as a prerequisite to action in literary history at the midcentury. Novels in the second half of the century increasingly turned their attention to the way action could be elicited from bodies without the willingness or awareness of their owners. This phenomenon is most evident in the Gothic coercion of imprisoned heroines stripped of their ability to determine their own actions (*Clarissa* imports this scenario to the drawing room), seduction narratives that "steal" consent by forcing sensations on a body to alter the thoughts of the mind, and urban adventure tales that frequently involve a character getting swept up in the movements of a crowd.

[26] See Mikhail Bakhtin, *The Dialogic Imagination*, trans. Caryl Emerson and Michael Holquist (Austin: University of Texas Press, 1981), 37, for his discussion of the "surplus" of character.

As early as 1749, however, Henry Fielding's *Tom Jones* made the case that the body itself was a source of action potentially at odds with the mind lodged in that body, rather than merely the object of external forces hostile to self-sovereignty. For more than two centuries after its publication, *Tom Jones* was famous for embarrassing the didactic expectations of novel-readers through the narrative's genial ambivalence towards a protagonist whose sexual behavior is entirely unchecked by the moral constraints of his consciousness.[27] As Fielding's narrator points out, "the passions, like the managers of a playhouse, often force men upon parts without consulting their judgment."[28] Having set up these mechanics of how the body produces action, Fielding displaces the act of consent from inside the mind as a cognitive initiation of action, and refigures it as an external and artificial form that imposes fictions of moral intent onto a confused scene of action where it is unclear who has done what. From the first inquiry into who fathered the infant Tom, structures for attributing actions to individual agents go wrong: "as [the Latin teacher's wife] was sure of his guilt, she would never leave tormenting him till he had owned it, and faithfully promised that in such case, she would never mention it to him more. Hence, he said, he had been induced falsely to confess himself guilty, though he was innocent, and that he believed he should have confessed a murder from the same motive."[29] The falsely accused Latin teacher is coerced into consenting to punishment for a crime he did not commit. The plot of the novel as a whole unfolds within this jumbled field of action, as the misdeeds of Tom's boyhood companion, Blifil, are consistently and artfully misattributed to Tom, which takes the entire narrative to untangle and sort out. By disrupting the correspondence between the novel's archive of actions and the crowded field of actors who might have committed them, Fielding uses this

[27] In "*Tom Jones* and Morality," G.K. Chesterton provides a discussion of these reactions. See *All Things Considered* (New York: Sheed and Ward, 1956).
[28] Fielding, *Tom Jones*, ed. John Bender and Simon Stern (Oxford, 2008), 286.
[29] Fielding, *Tom Jones*, 85.

softened relationship between actions and actors as a new space for character development: in order to transform Tom from a stock character "born to be hang'd" into landed gentry, Fielding continually reshuffles the novel's collective actions, attributing different actions to Tom at different points in the narrative.[30]

Fielding, as well as Rousseau and Richardson, associates the body with impersonal modes of behavior that notably do not bear the signature of an individual's intent in the way actions arising from consent would. Whether vulnerable to external coercions or else the source of generically "low" behavior, the body throughout eighteenth-century fiction is the frequent site of social disruption that cannot be resolved through increased cognitive discipline. The body in fiction becomes inextricably bound up with the idea of involuntary action, which serves both to compromise the Enlightenment ideal of self-sovereignty and also to introduce a degree of unruliness that unsettles principles of social organization internalized by the mind as moral and legal norms. This valence of the body was not merely the invention of imaginative novelists, but was taken up by political theory as well. Hume's suggestion that the body acted on instincts that were key to social cohesion was largely anomalous for most of the century, whereas Rousseau was closer to the mainstream in his belief that the non-mindful impulses of the body produced, in the aggregate, the chaotic behavior of the state of nature. What these authors demonstrate is that the body became an inescapable factor shaping behavior—a set of forces outside consciousness that proved impervious to the contractual dictates of "should" and "ought."

The Monster in the Flesh

Frankenstein molds a lump of this impulsive and susceptible flesh into a body that mimics the form of humanity but violently re-defines what it means to be human. When Victor

[30] Fielding, *Tom Jones*, 143.

learns how to create life, the result is a version of the human subject animated solely by the bio-chemical principles Victor discovered. By giving consciousness to a body animated purely by materialist means, the novel purges human flesh of any transcendent soul or mental dualism, as though to ask what would happen if such a concept of the human subject were unleashed onto society. For Rousseau, the social contract lifted individuals out of their bodies so they could act on reason; *Frankenstein*, by contrast, depicts rational subjectivity arising from bodily matter. Whereas consent implies that an action originated inside a mind sovereign over the behavior of its body, *Frankenstein* makes the body the seat of thought and, in doing so, refigures subjectivity as an effect of automated processes taking place in the flesh. Victor makes this discovery of how to re-create human life by standing vigil in morgues and slaughter houses "to observe the natural decay and corruption of the human body…[to see] how the worm inherited the wonders of the eye and brain" (33-4). Decomposition evacuates these bodies of individual lives and transforms the fundamentally subjective experiences of vision and thought into the impersonal chemical processes underlying phenomenal experience.

Roberto Esposito identifies the emergence of this conception of the human body with a disruption to political order. He outlines how in the early nineteenth century it came to be accepted as fact that there was "a double biological layer within every living being—one vegetative and unconscious, and the other cerebral and rational."[31] "Once human beings were thought to be…determined, in our passions, and even in our will, by a force more in keeping with simple reproductive life, the very premise on which the modern political paradigm was founded could no longer be sustained." As opposed to the cerebral account of action encoded in

[31] Roberto Esposito, *The Third Person*, trans. Zakiya Hanafi (Cambridge: Polity, 2012), 6.

social contract theory, what does Victor's refiguring of subjectivity as the product of automated bodily processes do to affective relations in the novel?

Immediately following his vigils among decomposing corpses, Victor has a dream that pits this materialism against a concept of the subject as constituted by its relations with particular individuals.

> I thought I saw Elizabeth, in the bloom of health, walking in the streets of Ingolstadt. Delighted and surprised, I embraced her; but as I imprinted the first kiss on her lips, they became livid with the hue of death; her features appeared to change, and I thought that I held the corpse of my dead mother in my arms; a shroud enveloped her form, and I saw the grave-worms crawling in the folds of the flannel. (39)

By Rousseau's account, members of civil society develop the capacity for rationality and sentimentality through their interactions with other individuals under the protection of a social contract that shapes relations into peaceful ones. For Victor to make such highly particularized individuals as mother and love-interest interchangeable with one another (and indistinct from the heaps of bodies he has been studying) points to a disruptive politics attached to his scientific materialism. His dream strips individuals of the individuality they acquire by virtue of being the unique objects of sentimental value, and their particularity decomposes into the undifferentiated bodily matter to which Victor has reduced humanity. Having melted humanity down to its fleshly substrate, he imaginatively reassembles that flesh into singular bodies that have new potential to run together and lose their individuality. To be an embodied subject, then, is to experience an interchangeability as part of a mass of bodies composed of the same flesh.

When he stitches a collection of these body parts together, Victor bestows life on a creature who is both an individuated consciousness and a multiplicity of bodies; or, "a filthy

mass that moved and talked" (121). The creature's early life centers on a struggle between his faculties of consciousness and this impersonal body that urges him into actions contrary to his conscious intentions. The overdetermination of the human subject Esposito identifies as a split between automated bodily processes and a cerebral basis for action is, in *Frankenstein*, mapped out over two distinct kinds of language Shelley uses to compose the creature. As Nancy Yousef has observed, the creature's early life is crafted as an allusion to John Locke's theory that sensations in the body furnish the mind with ideas, which "is presented as the achievement of an autonomous, singular individual."[32] Yet this rational form of thought is ruptured by "fearful howlings" and "a kind of insanity…that burst all bounds of reason and reflection" (111, 113). Although the creature can articulately express rational and sentimental interiority, he cannot account for his actions as the product or externalization of those thoughts. We can follow Locke's model of thought in unbroken form through the creature's awakening, as sensations in his body are converted into corresponding ideas in his mind, where a complex of associations among those ideas produces patterns of thought like reason and causal logic. When the creature "saw, felt, heard, and smelt, at the same time" he first learns "to distinguish [those] sensations from each other," and then turns them into ideas that name objects: "I gradually saw plainly the clear stream that supplied me with drink, and the trees that shaded with their foliage…I found a fire…and was overcome with delight at the warmth I experienced from it." Plunging his hand into the warmth, the creature "quickly drew it out again with a cry of pain," and, like Locke before him, marvels "that the same cause should produce such opposite effect!" (80-1).[33] By replacing sensations in the body with ideas in the mind, Locke provides the natural philosophy that made it possible for Rousseau to think of the mind as the sole source of action.

[32] Yousef, "Monster," 201.
[33] See John Locke, *An Essay Concerning Human Understanding*, ed. Peter Nidditch (Oxford, 2011), 137.

At other times when the creature finds himself acting out that "insanity…that burst all bounds of reason," however, his conscious control falters. Having learnt to love the De Lacey household to which he has secretly attached himself, the creature finds himself acting out scenes of violence against that household (102). When the De Lacey family turn him out, he confesses "I could with pleasure have destroyed the cottage and its inhabitants, and have glutted myself with their shrieks and misery…I placed a variety of combustibles around the cottage…I lighted the dry branch of a tree, and danced with fury around the devoted cottage" (110-3). His conscious thoughts go from being the source of his behavior (e.g., thrusting his hand into fire because he enjoyed its warmth) to assume a kind of observational role as he narrates with some horror his own behavior that he cannot mentally intervene in.

Frankenstein re-tells the story of the social contract featuring this troublesome body. When Victor and the creature strike a bargain, Victor promises to create a companion for the creature if the creature vanishes from the civilized world. In essence, Victor hopes that if the creature has a sexual mate and food for subsistence—if the most basic of embodied needs are guaranteed—he can silence this troubling emblem of the human body and restore a less alarming concept of the human subject. This arrangement forms the core of Rousseau's *On the Social Contract*, which predicates the development of a sovereign, rational mind on silencing the body's appetites by ensuring that its most fundamental needs will be met. But Victor breaks the deal and destroys the mate, reflecting that:

> he had sworn to quit the neighborhood of man…but she had not; and…might refuse to comply with a compact made before her creation…One of the first results of those sympathies for which the daemon thirsted would be children, and a race of devils would

be propagated upon the earth who might make the very existence of the species of man a condition precarious and full of terror (138).

In a move resembling the "emergency politics" that suspend citizens' rights to defend the health of the population as a whole, Victor finds that this contract must be broken in order to protect society—a precise inversion of Rousseau's conviction that the form of the contract is society's best protection.[34] Sexual desire and the appetite for food, Victor reasons, will irresistibly govern the body's behavior. Even when those needs are met, they still appear to provide a basis for behavior that contractual obligation cannot check.

Victor's logic in destroying the mate is, as Maureen McLane argues, that of a Malthusian population theorist.[35] In assuming that no contract will be able to overrule the urge to reproduce and the appetite for food, Victor echoes T.R. Malthus's thesis that a crisis in overpopulation would result from the two immutable principles of human nature, sexual desire and the necessity for sustenance. Malthus transforms these embodied urges into rates operating at the scale of large numbers: the rate of population growth and the corresponding rate of food consumption. By setting these rates in ratio against what he imagines to be the fastest rate of agricultural production possible, Malthus views overpopulation as the inevitable result of seemingly deterministic forces governing mass behavior, regardless of the conscious choices of the individuals whose actions comprise those rates.

This view that certain kinds of action intrinsic to human nature should be regarded as collective rates was prevalent in early nineteenth-century political economy. Actions understood

[34] On emergency as a revision to Enlightenment political theory, see Bonnie Honig, "Three Models of Emergency Politics," *boundary 2* 41, no. 2 (2014): 45-70; and Esposito, *Immunitas*, trans. Zakiya Hanafi (Cambridge: Polity, 2011).
[35] McLane, *Romanticism*, 103-4; T.R. Malthus, *Essay on the Principle of Population*, ed. Geoffrey Gilbert (Oxford UP, 1999).

to be automatic and inevitable due to the functioning of the body—birth, death, illness, consumption, violence, sex—were measured as statistical rates that became the new objects of population management.[36] According to this concept of action, it came to matter less who performed what action or even that a murderer be brought to justice for every murder, and instead mattered more that death rates not rise above or fall below certain levels. Victor's aborted deal with the creature signals the inability of contractual form to return embodied action to the province of self-government. The dynamics of action throughout *Frankenstein* effectively recall political economy's massified conception of action: the interchangeability among bodies Victor visualizes in his dream makes human flesh seem inherently collectivized, and its ungovernable urges are here coded in terms Malthus uses to describe a massive surplus population. Indeed, when Victor produces a materialist copy of the human subject, he winds up with a creature whose body is itself a mass of many bodies combined. *Frankenstein* yokes the body to unruly forms of mass behavior that the contract fails to individuate and subordinate to conscious control. How did such a conjunction between the material body and the mass form, and what alternate kind of social cohesion does it make available?

The Climate Effect

Montesquieu has long been recognized as the most influential writer to link climate to questions of why populations behave as they do, but comparatively little has been said about his detailed interest in the body as the place where climate creates that effect. Montesquieu argues that environmental forces condition the nerves, muscles, and blood to make people react in the same way to similar stimuli. To belong to a population, then, is to be a certain kind of body. The

[36] This is most forcefully documented by Foucault in *Security, Territory, Population*. Systems of population management began to take life itself as their object of management, which involved statistically enumerating certain kinds of actions as a way of visualizing a population's health.

free exercise of consciousness falls in line with mass behavior thanks to the way climate determines the somatic capacity for thought and affect in a region. The sections of *Spirit of the Laws* devoted to the analysis of climate constitute the lynchpin for the entire work, in which Montesquieu reframes the task of government as the regulation of whatever tendencies to vice climate installs in a regionally-shared body. In this account, government and social organization take shape through the automatic behavior of the body, long before any nominal moment of conscious consent arises and seemingly without the need for deliberate decisions about government.

Montesquieu speaks of climate as both the field of mass behavior in which populations develop their own regional characteristics, and also as a more intimate set of pressures acting within individual bodies. A population is a coherent one in Montesquieu's eyes when the automatic and largely ungovernable reaction of bodies to the same stimuli line up with one another, and exhibit differences from the way people respond in different regions. An opera staged with "the same pieces and the same performers" in England and in Italy produces effects so different from one another "that it seems almost inconceivable" that it could really be the same music.[37] With this example, Montesquieu places his system of thought outside the Enlightenment tradition of aesthetic judgment Immanuel Kant would codify at the end of the century, in which the sensuous apprehension of an aesthetic object becomes intelligible to one's own mind and to other minds as it is mediated through universal criteria for judgment, allowing for the possibility of agreement or disagreement.[38] Although the sensual features of an aesthetic object are presumably apprehended in the same way by any Kantian observer, it is the free

[37] Montesquieu, *The Spirit of the Laws*, ed. Anne Cohler, Basia Miller, and Harold Stone (Cambridge, 2014), 233. Further references are cited parenthetically.
[38] See Immanuel Kant, *Critique of Judgement*, ed. Nicholas Walker (Oxford, 2009).

exercise of judgment that ruptures that universalism, even as universal criteria for judgment create the possibility of restoring consensus at a higher level. The collectivity that gathers around Montesquieu's opera, by contrast, is based entirely in the sensuous. The "cold and phlegmatic" English response, versus "the other so lively and enraptured," leads Montesquieu to conclude that "as climates are distinguished by degrees of latitude, we might distinguish them also, in some measure, by those of sensibility."

The important point here is that when collective sensations like an opera organize people into collective responses, it makes visible the internal bodily dispositions that determine the political history of a nation-state. The features of a state that cannot be explained as a result of what the populace wills, such as intelligence or commercial prosperity, are put in place over many years by the "sensibility" of bodies—the way they take in, process, and react to sensations—that conditions the capacities of the mind.[39] I will explain further how Montesquieu turns climatic conditions into sensibility. But a climate that increases the power of self-interest to predominate over sympathy might cause civil war to plague that region, just as a climate that makes mental associations particularly rigid would make that region inhospitable to the foreign manners that come into contact through commerce. Such effects of climate on the sensibility of a region are yielded up over time to cultural historians as a region's "customs and mores." Individual difference arises not in contradistinction to a population's customs and mores, but rather as the range of variance within the sensory possibilities afforded by the interaction between a given climate and an acclimatized body. "Imagination, taste, sensitivity, and vivacity" in an individual "depend on an infinite number of small sensations" that allow for the play of

[39] See John Brewer's "Sentiment and Sensibility" in *The Cambridge History of English Romantic Literature*, ed. James Chandler (Cambridge UP, 2009) for a consideration of sensibility's power to collectivize responses to aesthetic sensations.

individuality even as the entire population takes in the same sensory conditions and responds uniformly.

Centuries before the discipline of psychology subjected the recesses of the mind to standards of normal social behavior, Montesquieu achieved the same effect by locating subjectivity in the nerves, muscles, and blood and placing these under the sway of climate. Through experiments on sheep's tongues heated to different temperatures, he shows how climate is taken in and internalized within the body. Sheaves of nerves open or close themselves off to sensations and the microscopic papillae on surface tissues make the skin more or less receptive to exchange with its environment based on temperature. The stiffness of muscle fibers varies according to temperature, as well, and the composition of the blood is affected by properties of air such as rates of perspiration and rehydration. "In cold countries," as Montesquieu writes, "the tissue of the skin is contracted and the papillae compressed," protecting the nerves from the full effect of their environment. As a result, "sensation hardly passes to the brain except when it is extremely strong." This means that "in cold countries, one will have little sensitivity to pleasures," which, on the one hand, means that vices such as drinking or sexual promiscuity are less likely to take hold within those populations. On the other hand, in order to keep the imagination and faculties of taste from falling into disuse, stimulants such as alcohol are necessary supplements to the dulled senses of bodies in that region. When "cold air contracts the extremities of the body's surface fibers," it keeps "the action of the heart and the reaction of the extremities of the fibers [] in closer accord…This increases [the fibers'] spring and favors the return of the blood from the extremities of the heart." This means that "the blood is pushed harder toward the heart and, reciprocally, the heart has more power" (231-3). The combination of

stronger circulation, tighter bundles of muscle fibers, and general insensitivity to the allures of pleasure produces a more vigorous body in cold climates.

Erasing the line between the psychological and the physiological, Montesquieu articulates interiority as a mechanistic outcome of climate acting on bodily tissue. In cold climates, "greater strength should produce…more confidence in oneself, that is, more courage; better knowledge of one's superiority, that is, less desire for vengeance…more frankness and fewer suspicions…it should make very different characters" (232). He notes more variety of character in cold climates, and concludes that such races are likely to develop robust merchant economies since their prejudices are few and short-lived.

Montesquieu observes the opposite effects in a hotter climate, which "by contrast, relaxes [the] extremities of the fibers and lengthens them; therefore, it decreases their strength and their spring" (231). The increased sensitivity of bodies under conditions of heat causes a "delicacy of organs [] in hot countries," which means that "the soul is sovereignly moved by all that is related to the union of the two sexes…[whereas] in northern climates, the physical aspect of love has scarcely enough strength to make itself felt" (233). The elevated rate of perspiration and evaporation in the air of such climates "dissipates much of the watery part of the blood" that is necessary for good circulation. Combined with the "very weak action and little spring" of loosened muscle fibers, weaker circulation animates a much lazier body whose heightened sensitivity causes fearfulness and whose flaccid springs of action make prejudice unlikely to be overturned (238-9). Such races, Montesquieu advises, require stricter education to manage their impressionable natures and tendencies to prejudice. By contrast to "the northern climates [where] peoples [] have few vices…as you move toward the countries in the south, you will believe you have moved away from morality itself…prostration will pass even to the spirit; no curiosity, no

noble enterprise, no generous sentiment…laziness there will be happiness" (234). Elements of character generally considered features of an individual and his or her personal history—sentimentality, cleverness, bravery, honesty, strength of will—are dissolved into mass dispositions that can account for the religious outlook, military history, and economic prosperity of a regional population. The shared biology that produces these dispositions essentially transforms the embodied interior into the space of mass behavior.

By attributing an individual's action and affect to automatic processes inside a body that does double duty as part of a mass and the seat of individuated character, Montesquieu raises a question of accountability that would be invisible from a Rousseauvian perspective. When do actions arise from a particular body, and when is that body merely an appendage of a mass body operating uniformly within a population? Montesquieu does not so much provide an answer as introduce a degree of wobble to questions of accountability. When he tries to distinguish between alcoholism in warm climates from the fortitude against cold supplied by alcohol in cold regions, he writes that a northern climate "seems to force a certain drunkenness of the nation quite different from drunkenness of the person…a German drinks by custom, a Spaniard by choice" (239). It is not that a cold climate requires (and equips) Germans to drink a great deal whereas inhabitants of a warm climate, which supplies no such necessity, are morally responsible for their choice. In both cases, the act of drinking moves back and forth on a spectrum between climatic determinism and individual responsibility; the German custom forms over many years from the invigorating effects of alcohol against the cold, the Spaniard's choice is made for him time and time again over the same time period by the loosened fibers and dissipated blood that prevent him from resisting the appeal of alcohol.

What distinguishes the two cases, and what leads Montesquieu to hold the Spaniard's drinking up as a "choice" in need of correction unlike the harmless German custom, is the question of what counts as a virtue and what counts as a vice in different climates. For example, much like alcohol, prostitution poses little threat among northerners, whose decreased sensitivity and resistance to pleasure limit the dangers of promiscuity. In hot climates, where the desire for pleasure irresistibly governs the body, sexuality tends to be the subject of strict socio-moral rules that are necessary in order to moderate the tendencies of the body in those regions. Chastity emerges as a virtue, and promiscuity as a vice, in nations closer to the equator where lax nerve fibers leave people with little capacity for practicing self-government without external guiderails that sharpen morality into superstitious fear.

In an effort to explain why nations across the globe end up with distinct systems of government, Montesquieu links authoritarian governments to this absence of self-restraint in hot climates, unlike northern climates where individuals are self-regulating. Each system of government comes with its own understanding of what constitutes virtue. Montesquieu finds republics mainly in colder climates where the body does not insist on self-gratification. Aristocratic republics, such as Britain's, enshrine self-restraint as the chief political virtue, which is necessary for members of a ruling class to check their ambition to steal power from one another and to disguise their differences from commoners by adopting easy manners. A democratic republic, by slight contrast, ought to define virtue as "renunciation of oneself" in order to promote the welfare of the nation over the welfare of any group of citizens (35). This virtue, which Montesquieu views as unnatural, relies on education to inculcate self-renunciation over more instinctual self-interest. At the opposite extreme, despotism depends on a body ruled by pleasure and appetite that cannot control itself. In climates inhabited by this sort of body, the

absolute authority of a despot's rule stands in for self-government. Effective government of a population of dissolute bodies essentially means externalizing the faculty of self-control since it cannot be internally sustained. The absolute power accorded to the despot's will under this system of government is only feasible in certain climates where liberty is more vice than virtue. Only in cases where Montesquieu concedes that despotism seems best for people is slavery acceptable to him—since despotism makes slavery the rule rather than the exception, Montesquieu regards the practice of keeping slaves in such countries as less egregious than it would be where some enjoy liberty.

Climate, in effect, slips the features of the population beneath the skin of the individual. By emphasizing the way climate acts *within* the body, Montesquieu stands apart from most other discussions of climate in the eighteenth century, which tended to view it as a set of external conditions that acted on roughly the same kind of body posited by Locke. Travel writers and Orientalists understood foreign atmospheres to enter the body through the senses and throw the mind into disorder.[40] Eliza Haywood's *Eovaai* (1736), for instance, uses sexual consent as an allegory for political consent in order to show how the thicker air of imagined eastern climates creates sensations in the body that overwhelm an individual's ability to decide his or her own actions.[41] In thinking of eastern climates infiltrating the body through its pores and provoking corresponding ideas, Montesquieu's peers preserved in the back of their minds the individual subject of Lockean epistemology. For Montesquieu, climate's effect on the body is entirely separate from the body's ability to sense things like temperature and humidity. Climate assembles populations *not* by offering a shared set of sensations to large numbers of Lockean

[40] See, Denis Diderot, "Supplement to Bougainville's Voyage," in *The Libertine Reader*: *Eroticism and Enlightenment in Eighteenth Century France*, ed. Michael Feher (New York: Zone Books, 1997).
[41] Eliza Haywood, *The Adventures of Eovaai*, ed. Earla Wilputte (Ontario: Broadview Press, 1999).

subjects so that they think similar thoughts, but by shaping at a deeper somatic level a given region's sensibility, or the bodily process for taking in sensations and determining what they mean and what to do with them. What an individual wills is determined by the mechanics of nerves, muscles, and blood, which act uniformly in a given region to produce individuality within the matrix of mass behavior. By making the automatic workings of the body identical to both the individual and the mass, Montesquieu houses them both in the same body—a body whose actions seem more determined by climate than volition, and whose biology pulses with the dynamics of the mass.

Monstrous Climates

I have argued thus far that *Frankenstein* asks readers to imagine human subjectivity as a function of the flesh—flesh that is too impulsive, impassioned, and undifferentiated to perform the cognitive procedure of consent required of contractual subjects. Montesquieu, in arguing that climate has a standardizing effect on the body's impulses, takes the non-conscious inner processes of the flesh as an alternate basis for social cohesion. Although critics have pointed out the novel's fascination with arctic landscapes, there has been no attention paid to the way *Frankenstein* hews closely to the rules Montesquieu lays out regarding the relationship between climate and the body.[42] The creature's body, as I have suggested, visualizes the way Montesquieu implants the features of a population within the biology of the body; by making the creature's skin "scarcely cover[] the work of muscles and arteries beneath," Shelley uses that understanding of human behavior to disfigure the form of the individual shaped by social contract theory (39).

[42] See Jessica Richard, "'A Paradise of My Own Creation': *Frankenstein* and the Improbable Romance of Polar Exploration," *Nineteenth-Century Contexts* 25, no. 4 (2003): 295-314 for a persuasive account of the centrality of these terrains to Shelley's narrative, as well as a useful review of the symbolic interpretations critics have advanced.

Climate is not external to the body in *Frankenstein*, but rather penetrates into its interior. When the creature experiences volatile surges of affect that exceed what a purely rational mind would produce on its own, those feelings originate in "a fierce wind [that] arose from the woods and…tore along like a mighty avalanche, and produced a kind of insanity in my spirits that burst all bounds of reason and reflection" (113). Criticism has assimilated the novel's landscapes to a proto-Victorian version of pathetic fallacy, yet this climate does not actually serve as a projection screen for a pre-existing interiority.[43] To the contrary, it disrupts the creature's internal longing for companionship, re-framing those emotions as an irrational rage that ruptures social ties. This relationship between climate and body in Shelley's novel is compounded by the distinctively Montesquieuvian language she uses to narrate the travels that structure the narrative. Notably, when Victor's friend Clerval observes the "spirit" that arises from various terrains, he comments that

> the mountains of Switzerland are more majestic and strange; but there is a charm in the banks of this divine river, that I never before saw equaled…that group of labourers coming from among their vines; and that village half-hid in the recess of the mountain. Oh, surely, the spirit that inhabits and guards this place has a source more in harmony with man, than those who pile the glacier, or retire to the inaccessible peaks of the mountains of their own country (129).[44]

Although they speak with detachment about many different climates, Victor's return to his native climate is still registered within his body as an automatic quickening of his pulse.

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[43] Siobhan Carrol writes that "the weather observed by Victor and the creature so closely mirrors their own emotional states that it is difficult to separate observation from pathetic fallacy." See "Crusades Against Frost: *Frankenstein*, Polar Ice, and Climate Change in 1818," *ERR* 24, no. 2 (2013): 21-230.

[44] Clerval's commentary here and throughout echoes Montesquieu's mode of assessing what he calls "the general spirit of a nation" as the effect of physical conditions and cultural customs have on the disposition of a region's inhabitants. See Montesquieu, *Spirit*, 8-9.

Whereas Montesquieu looked to climate to show how nations form without the necessity of a citizenry's consent, *Frankenstein* inverts climate's function. The novel throws its aesthetic energy into imagining extreme climates and migration across dramatically different climates that activate bodies into relations of antagonism that contractual agreement cannot resolve. While hidden near the de Lacey household, the creature learns how Felix came to love a woman they call "the Arabian" (93). The story the creature hears recounted emphasizes the way contracts work differently in different regions and fail to join natives of two incompatible climates together into an accord. Dependent on Felix's help, the young woman's father had "quickly perceived the impression that his daughter had made on the heart of Felix, and endeavored to secure him more entirely in his interests by the promise of her hand in marriage…Felix was too delicate to accept this offer" (99). A deal that amounts to little more than slavery is acceptable to "the Turk," but unacceptable to Felix's northern European sensibility; Shelley's association (like Montesquieu's) of slavery with the East leads her to imagine "the Turk" agreeing to trade his daughter without her consent, whereas to Felix a contract formed through such coercion would be invalid. The same story illustrates the supposed cultural weakness of contractual obligation in the East when "the Turk" "became a traitor to good feeling and honour" by breaking the deal he had struck with the de Lacey family after they had ruined themselves in his aid (101). A society that depends on the binding power of the contract appears viable in certain regions only—and the novel opens up the ways in which that sensibility can come apart through population migration across incompatible climates and under the pressures of climatic extremes.

As Victor's narrative begins, the Frankenstein family and the surrounding city of Geneva model a community almost infinitely expandable in its ability to accommodate outsiders. The placid waters and terrain sheltered by high mountains that Victor describes provide the

conditions under which civil relations can flourish, as it is a society both accessible to merchant-commerce by ship but also protected from invasion or threat over land. We learn about the fertility of the region through Victor's younger brother who seems destined to become a farmer, since in this climate "a farmer's is a very healthy, happy life," not to mention that it is evidently a vocation that would support the second son of a middle-class family (45). It is no surprise that a family such as Victor's, living under this combination of agricultural stability and cosmopolitan prosperity, would be able and willing to welcome newcomers. Shelley seems determined to prove its inclusiveness, as the Frankenstein family expands to include the displaced refugees of crises elsewhere: Caroline, the orphaned daughter of a ruined friend, is joined to the family through marriage, and a girl in similar straits, Elizabeth, is added with the prospect that she will one day marry Victor. They incorporate themselves seamlessly through consent to marriage contracts. Elizabeth's development as a child illustrates the way the contract comes to be internal to her natural inclinations: "No one could better enjoy liberty, yet no one could submit with more grace than she did to constraint and caprice" (20). Under these conditions, individuals naturally develop as the kind of contractual subject Rousseau takes as the basis for civil society. The family continues to expand with the addition of Justine, a servant whose inclusion in the family is made possible by "the republican institutions of [Geneva]," which "produced simpler and happier manners than those which prevail in the great monarchies that surround it. Hence there is less distinction between the several classes of its inhabitants…a servant in Geneva does not mean the same thing as a servant in France and England" (46). By Montesquieu's rules, Geneva's climate corresponds precisely with a republican government and with the self-governing sensibility Elizabeth exhibits.

Victor's monstrous creation, however, forces him to rethink that sensibility as the product of artificial and flimsy constraints on the dark potentialities of human nature. To acknowledge materialist theories of human life in the way Victor does is to wrest the concept of humanity away from the shape it takes in Geneva and to attribute that and all behavior instead to the unconscious biology that the creature's body lays bare. Recovering from the shock of his first encounter with the creature, Victor visits an Alpine landscape, sublime in scale, that is seemingly suited for something grander than human life as he has come to know it in Geneva: mountains "belonging to another earth, the habitation of another race of beings" (73). The creature, who soon appears, however, is right at home in this climate, "bound[ing] over the crevices in the ice, among which [Victor] had walked with caution" (76). Moreover, Victor himself discovers that this otherworldly climate can act on his own sensibility in the way Montesquieu describes: "Alas! why does man boast of sensibilities superior to those apparent in the brute; it only renders them more necessary beings. If our impulses were confined to hunger, thirst, and desire, we might be nearly free; but now we are moved by every wind that blows" (75). Victor here alludes to Necessitarian philosophy, which views all actions and events as part of a long string of cause and effect according to the laws of mechanical physics—laws that, by this logic, govern not only the movement of external objects, but also the physiological springs of interiority within the body.[45] Victor points to climate as a set of forces that determine the actions and dispositions of the body's internal mechanisms. Reversing Rousseau's social contract narrative, Victor suggests that purely instinctual life in a state of nature would allow at least the illusion that individuals act freely; the uplifted faculties of Mankind, by contrast, reveal the extent to which even the most personal and autonomous dimensions of interiority are actually the product of physiological

[45] See James Harris, *Of Liberty and Necessity: The Free Will Debate in Eighteenth-Century British Philosophy* (Oxford, 2005).

processes determined contextually. By placing human life within such a climate where survival is so precarious that "the slightest sound, such as even speaking in a loud voice, produces a concussion of air sufficient to draw destruction upon the head of the speaker," Shelley imagines conditions under which contracts and reasoned discussion would be unable to draw humanity together into organized society (75). It is here, after all, that Victor first tells the creature "there can be no community between you and me" (78). The only relations possible on this landscape are ones of fragmented subsistence and bitter contest.

These relations of antagonism originate not with the creature but rather with human life itself. Although he appears as a threatening outsider wherever he goes, each time the creature opens his mouth he demonstrates how his savagery reflects the ill-usage he received from every outpost of society. By this logic, the creature is not an additive that cannot be incorporated into human society, so much as a reflection of the potentialities of humanity itself.[46] Shelley is at some pains to show how the disruptions posed by the creature are behaviors recapitulated from human populations that inhabit the extreme climates in which Victor and the creature continually meet. When Victor breaks his contract to create a mate for the creature, for instance, it is not the creature who falls short of his obligations. Rather, it is Victor's recognition that a contract would no more constrain the monstrous pair from overrunning Europe than it would constrain him from tearing up the mate's unfinished body. This breakdown of the contract's binding power takes place within a remote society whose climate and terrain similarly render contractual relations useless:

[46] See David Marshall, *The Surprising Effects of Sympathy* (Chicago, 1988); Denise Gigante, "Facing the Ugly: The Case of *Frankenstein*," *ELH* 67, no. 2 (2000): 565-587; and Nancy Armstrong, *How Novels Think* (New York, Columbia, 2005).

> …hardly more than a rock, whose high sides were continually beaten upon by the waves. The soil was barren, scarcely affording pasture for a few miserable cows, and oatmeal for its inhabitants…whose gaunt and scraggy limbs gave tokens of their miserable fare…All senses of the cottagers [had] been benumbed by want and squalid poverty…so much does suffering blunt even the coarsest of men (136).

In contrast to the navigable waters in Geneva, the sea here poses "an insuperable barrier" to commerce with the rest of the world (141). This society consists of the minimum form of organized interaction necessary for collective survival, a state of affairs enacted by the climate conditioning the cognitive and affective capacities of its inhabitants without any decisions or agreements on their part.

If Victor's childhood home and the de Lacey household demonstrate that a northern European climate can shape good contractual subjects out of the problematic flesh to which Victor reduces humanity, the creature's appearance on the scene challenges those forms of cohesion with a glimpse of some potential that humanity can develop in climatic extremes. His mismatched body parts and disproportionate scale make him serve as a figure for the incommensurability among different climates and their respective modes of personhood. First and foremost a climatic transplant, the creature points out that the climate of his birth—"the cheering warmth of summer, and…the rustling of the leaves and the chirping of the birds"—meant that his "heart was fashioned to be susceptible to of love and sympathy; and when wrenched by misery to vice and hatred, it did not endure the violence of the change without torture" (190, 188). His monstrosity forms as he "crept along the shores of the Rhine, among its willow islands, and over the summits of its hills….dwelt many months in the heaths of England, and among the deserts of Scotland…endured incalculable fatigue, and cold, and hunger" (139-

40). He grows into the extreme sensibilities demanded by the novel's sublime landscapes, where life is oriented to enmity and "benumbed" faculties of restraint. He comes to embody Mankind's most savage potentialities, and, as he migrates across more temperate European climates, he causes those populations to betray the same tendencies in themselves.

When civil society confronts its designated "outside," the result is a set of antagonistic relations whose virulence cannot be contained within civil terms. It is not simply that population migration across climates threatens to overrun Europe with people like "the Turk" who cannot seem to respect contracts. Rather, the confrontation between different sensibilities—between different ideas of what is natural versus what is unnatural in the human body—triggers a hostility between inside and out. Victor, after all, was the one who broke contract with the creature in order to defend contractual society. As Victor makes clear to the Polar explorer Walton who finds him hunting the creature, the violent affect the creature excites in him ultimately converges with his conscious, rational decisions: the creature, Victor tells Walton, "ought to die…When actuated by selfish and vicious motives, I asked you to undertake my unfinished work; and I renew this request now, when I am only induced by reason and virtue" (185). The threat the creature poses to humanity arises from within humanity, specifically from within the body when its flesh is understood to be like some kinds of flesh and unlike others.

This threat, to be sure, gets displaced onto the creature by many characters throughout the novel. Yet when Victor finds himself in the creature's outcast position, he finds that the institutions of civil order unsettlingly resemble the creature in the way they function. Arriving in Ireland as a murder suspect, Victor experiences the law as almost automatic anger irrationally directed at outsiders. The law is enforced, moreover, by a fast-growing crowd that gathers to assure Victor that, although they do not know "'what the custom of the English may be…it is the

custom of the Irish to hate villains.' While this strange dialogue continued, [Victor] perceived the crowd rapidly increase. Their faces expressed a mixture of curiosity and anger…a murmuring sound arose from the crowd as they followed and surrounded [him]" (145). Shelley imagines Irish justice in such a way that it resembles nothing so much as the way the creature's body unites a mass of parts into action, animated by unreasoning affect. This hostility at the level of the group works internally through the body, such that the characteristics of a collective determine the way its members take in sensations and assign meaning to them: "[the jailer's wife's] countenance expressed all those bad qualities which often characterize that class. The lines of her face were hard and rude, like that of persons accustomed to see without sympathizing in sights of misery" (149).

The violence internal to social order is thus strikingly similar to the savage tendencies the creature develops from climates that foreclose relations of civility. These are the same terms in which Bates has redescribed civil society as a set of preventative measures against mass violence: in order to create the artificial social conditions under which consent to contracts carried binding force, "the state was newly imagined as a political entity defined by foundational legal limitations that flowed from the constitution of political society by individuals with certain natural rights" (15). Montesquieu, in racializing different forms of government, ends up projecting any such mode of government based on force exclusively onto despotism in the Asiatic world. This projection begins to look analogous to characters' reactions to the creature, where they displace their own precipitous violence towards outsiders onto the creature as a perceived threat. It is as though the behaviors that Shelley unpacks from the creature's body in the most extreme of climates come to be potentially true of humanity at large. In this, *Frankenstein* braids together what will become a significant strand in the DNA of the Victorian

novel, where distinctions between social classes, nationalities, and even particularized individuals start to seem precarious when self-reflection turns up desires and impulses troublingly akin to the behaviors animating urban masses and colonized races. We can detect at this moment in literary history, in other words, an increasing interest in a philosophical transformation underway in the early eighteenth century that redefined the concept of humanity no longer as an interiorized essence best discovered by the inward-looking philosopher, but rather as the shared traits and mass behavior of humanity in the aggregate. *Frankenstein* represents one of the first and most sustained meditations on how the conscription of individuals to schemes of uniformity was, counter-intuitively, a source of dissensus at the level of the group.

CHAPTER TWO

The Body on the Moor: *Wuthering Heights* and the Solitary Scene of Species Life

Wuthering Heights (1847) is perhaps the most depopulated novel to come out of the Victorian era, yet it seems not to have enough names to go around. Catherine Earnshaw leaves behind a Cathy, the surname Linton is split to become both the younger Cathy's surname and the given name of another character, and the single signifier "Heathcliff" migrates to the position of a surname. "Earnshaw" travels down the generations as a surname until it replaces, through marriage, the "Linton" in Cathy Linton to recreate her as a second Catherine Earnshaw. With a small cast of characters who keep dying off, Emily Brontë still manages to recreate the over-crowded conditions Victorian fiction is known for. But she locates that over-crowding within the individual subject, as her characters discover that their lives are not properly their own. The scene of solitude loses the value it held in Romantic discourse as a mental autonomy from the busyness of other lives and is replaced by a system of inheritance that causes past lives to endure through other bodies, rendering multiple lives integral to any one self.

This system of naming, in creating composite identities, removes what Claude Lévi-Strauss calls "the self-sufficiency…of unambiguous individuation."[1] In "The Individual as a Species," an essay on the anthropology of naming practices, Lévi-Strauss uses the culture of Borneo to explain such overcrowding within the self. An individual, he observes, "may be designated by three sorts of terms: a personal name, a teknonym ('father of so-and-so', 'mother of so-and-so') and, finally, what one feels like calling a necronym, which expresses the kinship

[1] Claude Lévi-Strauss, "The Individual as a Species" in *The Savage Mind*, trans. George Weidenfield (Chicago, 1966), 212, 206.

relation of a deceased relative to the subject."[2] Unlike the teknonym and necronym, which Lévi-Strauss calls "relational terms" or signs of one's place within a group, the proper name appears, as he says, to "satisfy the requirement of unambiguous individuation."[3] In Lévi-Strauss's words, "proper names…present the terms related as so many distinct entities."[4] The interchangeability of proper names and necronyms, however, leads him to question the autonomy and self-containment of the individual named by a proper name, since a precise enough set of relational terms (teknonyms and necronyms) can designate the same individual equally well. Any system of naming "treats individuation as classification," such that "the ultimate units of the system are no longer single member classes with a train of successive living occupants"—that is, one proper name that happens to be held by a string of different people—"but classed relations between the dead and the living."[5] The proper name designates the intersection of a set of relations that constitute the individual. When a proper name is removed from the system on an individual's death, the relations that constituted that individual in life are made visible as the proper name vanishes and is replaced by a proliferation of necronyms. This relationality, however, is not the play of differences that the major branches of poststructuralism have made familiar, but rather consists of relations of sameness. When an individual "assumes a necronym," Lévi-Strauss writes, "he becomes one of the terms in a relationship, of which the other—since he is dead—no longer exists save in that relation which defines a living person with reference to him."[6] The dead are thus folded into the living. To be defined in relation to someone whose only existence is preserved within you is a relationality of sameness with another term—or, to put it another way, of difference and alienation from some part of the self.

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[2] Lévi-Strauss, *Species*, 191.
[3] Lévi-Strauss, *Species*, 206.
[4] Lévi-Strauss, *Species*, 197.
[5] Lévi-Strauss, *Species*, 197-198.
[6] Lévi-Strauss, *Species*, 198.

Or, as Catherine Earnshaw puts it, "I *am* Heathcliff!"[7] This identity between Catherine and Heathcliff has posed a problem for generations of critical readings that attempt to explain why that relationship fails to achieve social expression in the form of marriage. Dorothy Van Ghent, in 1952, defines their relationship as an "identity of kind," ascribing their attraction to the "anonymous unregenerate reality of natural energies," but she argues that the novel renders this mysterious identity of kind between otherwise distinct individuals thinkable as incestuous attraction between foster siblings, thus "provid[ing] an imaginative reason for the unnaturalness and impossibility of their mating."[8] The closest cultural vocabulary Van Ghent, much like the morally severe housekeeper who narrates the novel, can find to name such relations ends up designating it as unnatural. Nancy Armstrong's *Desire and Domestic Fiction* reads their "unrealized sexual desire" as "material that cannot be domesticated by marriage…definitely outside of culture."[9] Van Ghent and Armstrong both identify in *Wuthering Heights* something primordial that bears a fraught relationship to normative systems of social life, both acknowledging Brontë's novel as an exception to their influential accounts of Victorian fiction. They regard these dynamics as the problematic excess generated by forms of social order, something the novel rhetorically creates *ex nihilo* for culture to triumph over or interdict. By treating *Wuthering Heights*' eccentricities in this manner, criticism has failed to think of them as a positive difference with conceptual substance and a historical point of origin in their own right.

The identity between Catherine and Heathcliff, as we learn when their corpses finally join by decomposing into one another, is a relationship that forms between bodies understood first and foremost to be composed of the same kind of flesh. In life, Catherine and Heathcliff model

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[7] Emily Brontë, *Wuthering Heights*, ed. Pauline Nestor (London: Penguin Classics, 2003), 82. Further references are cited parenthetically.
[8] Dorothy Van Ghent, "The Window Figure and the Two-Children Figure in 'Wuthering Heights,'" *Nineteenth-Century Fiction* 7, no. 3 (December 1952), 196.
[9] Nancy Armstrong, *Desire and Domestic Fiction: A Political History of the Novel* (Oxford, 1987), 187, 180.

the affective relations that arise within a continuum of flesh, rather than between fully distinct individuals. Embodied subjectivity and its over-the-top forms of feeling stitch Brontë's characters into such tight configurations with one another that they discover within themselves the trace of other lives. Just as Catherine and Heathcliff's names become fragmented and circulate throughout the community, the diseases, desires, and antagonisms structuring their storyline similarly recreate themselves within the lives of other characters. They push desire and hatred to such a pitch of intensity that it tips over as fever into the body, where, contagion-like, those affective patterns spread and live on throughout the novel's collective flesh. By making Catherine and Heathcliff's tempestuous relationship haunt subsequent generations and reenact itself on other bodies, Brontë defines human flesh as the seat of essentially uniform and universal structures of feeling inherited as the remnants of lives past.

These dynamics could only occur within the shared body of the species.[10] Catherine and Healthcliff's attraction is no union of subjectivities, but rather a romance crafted out of the elemental structures bodies share with one another under the species concept. Their attraction is based on the way their bodies, since childhood, responded uniformly to the same moor environment by producing passions at the same level of intensity. Heathcliff is not, as Catherine acknowledges, the source of any "visible delight, but necessary"—necessary in that their identity with one another is not subject to change "as winter changes the trees…[and instead] resembles the eternal rocks beneath" (Brontë 82). She locates her feelings not within the developmental

[10] Historians of science have largely imposed a false teleology onto nineteenth-century species science, viewing the first half of the century as a series of steps leading up to the popularity of Charles Darwin. By the standards of the species concept as defined by Darwin's work, the cycle of inheritance in *Wuthering Heights* would be too short a timeline and the passions inherited too far a cry from anatomical traits to be taken seriously as a meditation on species life. At the time of the novel's composition, more than a decade prior to the appearance of Darwin's first truly influential publication, however, the status of the species concept was not yet solidified around an evolutionary model and involved a far shorter timeline of inheritance. Although after Darwin the passions were relegated to non-scientific spiritualist discourses, some of the most influential voices in early nineteenth-century species science still wrote in terms of a Divine Idea as the source mankind's composition, making the passions integral to the discussion of the hierarchy of simple to complex life forms.

timeline of her own life and actual experiences with Heathcliff, but within the deep time of the species, as something elemental to human life.

Species science in the first half of the nineteenth century was organized around the question of whether species' shared elemental structures represented an unchanging archetype or the end-point of an evolutionary process. *Wuthering Heights* appears to combine features of both camps. The archetypal theory, in casting the core composition of the human subject as static over time, would render coherent Catherine's sense that the sexual desire she feels for Heathcliff is a tale as old as the species itself and, as such, occupies the timescale represented by "the eternal rocks beneath." Conversely, the way such passions are passed down as an inheritance, starting with their most volatile iteration in Catherine and Heathcliff's story and ending up thoroughly domesticated some generations later, follows the evolutionary logic that ties human society to a primitive past.[11] Literary works that more explicitly take up the species concept such as Alfred Tennyson's "In Memoriam A.H.H." frequently map mankind's primitive past onto distant generations within a single family and call into question whether those natural passions can ever contain themselves fully within the constraints of social form. In *Wuthering Heights*, the passions generated in the context of Catherine and Heathcliff's shared flesh are what gets passed down through the generations, the source of the passions and violence that disfigure social relations in the Yorkshire community.

The melodrama Catherine and Heathcliff's storyline acts out primarily mobilizes two categories of behavior, sex and violence.[12] Episodes of seduction and confinement in Catherine

[11] Brontë's youthful poetry, in fact, continually juxtaposes these two forms of time as she observes them in nature: the daily, unchanging cycle of plants and weather, versus the linear temporality in which generations are born and die. See in particular "High Waving Heather," "Will the Day Be Bright or Cloudy?," and "Start Not Upon that Minster Wall" in *The Complete Poems of Emily Jane Brontë*, ed. C.W. Hatfield (New York: Columbia, 1995).
[12] My use of the term *melodrama* to describe the actions that continually recur throughout *Wuthering Heights* draws on Peter Brooks' *The Melodramatic Imagination: Balzac, Henry James, Melodrama, and the Mode of Excess* (New Haven, Yale, 1976), which associates that form with an affective excess that spills over the rhetorical constraints of

and Heathcliff's narrative concern the relationship between sex and violence, and in Heathcliff those terms converge. This convergence uncannily reproduces itself throughout the novel in successive generations, as seduction and confinement shadow one another throughout. Victorian anthropologists designated the origin point of civilization as the point at which sex and violence diverged from one another and sex became subject instead to rules of exchange.[13] By reversing that narrative of cultural progress, *Wuthering Heights* returns us to the primordial scene of pre-social humanity. Templates for domestic order and clear lines between social classes deteriorate into chaos, leaving behind a community that reflects instead the affective relations that form between bodies made up of fundamentally of the same kind of impassioned flesh. Thus Brontë transforms her Yorkshire community into something that looks as much like an object of anthropological inquiry as it does a representation of modern Britain.

In order to narrate that community, Brontë adopts an anthropological mode of cultural explication, framing the story from the perspective of a cosmopolitan outsider who attaches himself to the insights of a Yorkshire native.[14] Brontë does so, however, only to erode the formal detachment of that narrative perspective. Catherine and Heathcliff's distant past intrudes on the present in the form of fever and volatile affect that draws even outsiders to the community into its sticky web of species relations, compromising the voices that claim to speak about those relations with impartial objectivity. Postures of mental detachment crumble when situated in a body that finds itself haunted from within by the trace of other lives. This is not simply a case of a regional novel refusing the polite advances of cosmopolitanism; it is the staging of two

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fiction. With the exception that I am explaining this excess in *Wuthering Heights* by way of an emergent concept of the species as a set of excesses in relation to the constraints of social form, rather than the twentieth-century psychoanalytic models Brooks employs.

[13] See Kathy Psomiades, "The Marriage Plot in Theory," *NOVEL: A Forum on Fiction* 43, no. 1 (2010): 53-59.

[14] Although James Buzard's *Disorienting Fiction: The Autoethnographic Work of Nineteenth-Century British Novels* (Princeton, 2005) does not discuss *Wuthering Heights*, Buzard argues that early Victorian novels that perform similar pairings between narratorial voices prepared the ground for the rise of the anthropological method "the participant-observer" later in the century.

different versions of transnationalism in relation to one another. If cosmopolitanism, as Amanda Anderson has delineated it, was a mode of mental detachment from national and regional belonging that allowed for fluid movement through international cultural contexts, then the primitivism that ruptures social form in this Yorkshire community constitutes a similar refusal of national boundary by expressing something shared at the level of the body across lines of region, class, and, in Heathcliff's case, race.[15] Brontë conjures a sense of the species' capaciousness by factoring out differences internal to the human race, leaving behind a scene of social disorder that crystalizes out from what bodies share with one another. By staging the scene of species life in the depopulated Yorkshire region, Brontë isolates bodies in order to show how they inherit structures of feeling elemental to human life from a past that refuses to stay dead, which the novel captures as a form of haunting.

Wuthering Heights ultimately externalizes and mystifies those dimensions of embodiment that exceed the form of the individual, displacing the lives crowding the flesh into actual ghosts who revisit the narrative to ensure the continuation of their passions through other bodies. Solitude, a rare commodity in the overcrowded Victorian novel, was made to bear a great deal of conceptual freight, serving as the key to Romantic cognitive development and to the mental autonomy of the liberal individual.[16] To haunt solitude with the trace of action and affect from an asocial past, then, is to attach an unruly political connotation to the species concept, to stage it as a set of disruptions to the constraints of social form. By taking the distant past of a region peripheral to Britain and using its primitivism to describe something inalienably present

[15] See Amanda Anderson, *The Powers of Distance: Cosmopolitanism and the Cultivation of Detachment* (Princeton, 2001).
[16] On Romantic aesthetic experience, see Frances Ferguson, *Solitude and the Sublime: Romanticism and the Aesthetics of Individuation* (London: Routledge, 1992), and on the role of withdrawal into the self under Victorian liberalism, see Julia Stapleton, *Englishness and the Study of Politics: The Social and Political Thought of Ernest Barker* (Cambridge, 2006), and Anderson, *Bleak Liberalism* (Chicago, 2016).

within the human body, *Wuthering Heights* points to the species as a form of coherence across the lines of regionalism that the nation-state struggled to contain, yet also the source of natural energies that disruptively fail to find expression within the storylines, modes of personhood, and ways of life that novels of the era associated with modern Englishness.[17]

Inheritance

To re-cap briefly: when Lockwood, a gentleman from London, rents a house on the Yorkshire moors, he discovers a decimated social sphere in such chaos and so alien to his normative expectations that he immediately seeks local insight from his housekeeper as to what caused that disorganization. The housekeeper, Nelly Dean, reveals to Lockwood the long-ago love triangle between Catherine Earnshaw, Heathcliff, and Edgar Linton. Within that frame, Nelly narrates the rest of the novel in an effort to explain how those names are passed down and recombined over the generations to shape the present state of that community, where it is impossible for Lockwood to tell who is related to whom and how domestic relations came to be marked by such antagonism. All that is clear to him is that his new neighbors are caught up in a system of inheritance that inflects their behavior and that deforms the models of domesticity and social intercourse to which they are supposed to conform. Brontë chooses to capture inheritance in *Wuthering Heights* as a kind of haunting, a recycling of names, actions, and affect that cause the ghosts of past lives to intrude on the present and persist in enacting passions and conflicts that seem so out of place in modern English society that they draw Lockwood back into the distant past in order to uncover their source.

[17] In its basic outline, this model of different "pasts" proper to different regions has been a central part of arguments related to nation-formation in the early nineteenth century. See Eric Hobsbawm "Introduction: Inventing Traditions" in *The Invention of Tradition*, ed. Hobsbawm and Terence Ranger (Cambridge, 1983) and Katie Trumpener's *Bardic Nationalism: The Romantic Novel and the British Empire* (Princeton 1997), both of which associate fiction with the consolidation of centralized national traditions.

What he discovers is a society that, to the extent it deforms and falls short of modern standards of conduct, is animated by energies inherited from a past that antedates liberal individualism and its temperate modes of intersubjectivity. *Wuthering Heights* concerns *inheritance* in two registers: the transmission of affect that takes place within the matrix of the species, and Heathcliff's manipulation of the patrilineal transmission of property from generation to generation. The asocial energy waiting in this novel to burst forth at any available outlet finds expression in Heathcliff's ruthless economic behavior, as though competition in the economic sphere could be regarded as a harnessing of the competitive energy found in the sphere of natural life. *Wuthering Heights* breaks from novelistic convention in giving that masculine energy more power to shape society than the influence of feminine sentimentality.[18] As scholarship on Victorian naming practices indicates, shuffling surnames and recombining them with given names was not out of keeping with naming practices of the time.[19] Recycling extinct surnames as given names was a practice intended to affix individuals more tightly to patrilineal bloodlines at a time when the dispersal of property among children seemed to threaten the coherence of bloodlines long protected by primogeniture. The increasing portability of wealth following the industrial revolution allowed inheritances to be divided and bequeathed to a growing number of beneficiaries based on what according to Maxine Berg was a distinctly feminine sentimental logic, as opposed to rigid rules of inheritance centered on masculine legacy.[20] In contrast to a more liberal modernity, Heathcliff's efforts to secure his legacy strengthens the binding power of the bloodline and ties the novel's social body to older, patrilineal practices. Rather than

[18] On Victorian fiction's affinity with the sentimental masking of economic competition, see Nancy Armstrong, "The Rise of Feminine Authority in the Novel," *NOVEL: A Forum on Fiction* 15, no. 2 (Winter 1982): 127-145.
[19] See Leonore Davidoff and Catherine Hall, *Family Fortunes: Men and Women of the English Middle Class, 1780-1850* (London: Routledge 2003), 222.
[20] See Maxine Berg, "Women's Property and the Industrial Revolution," *The Journal of Interdisciplinary History* 24, no. 2 (Autumn 1993): 233-250.

individuals choosing how to distribute inheritance, it is inheritance here—both of property and of affect—that dominates the individual will.

As Rachel Ablow's *The Marriage of Minds* argues, Heathcliff's shrewd orchestration of who marries who in order to consolidate his property makes the novel an outlier from its peers. It causes *Wuthering Heights* to read as an intentional failure in relation to novelistic standards that view Victorian fiction as a re-coding of marriage in sentimental terms that disguised more contentious power dynamics.[21] Ablow argues that the novel deviates from standard narratives of (feminine) personal judgment in order to diagnose a masculine will-to-power associated with economic competition, reversing the terms of the public/private sphere binary as they apply to the novel. What Ablow's reading illustrates is that marriage and inheritance in this novel are governed by that public, economic logic while at the same time originating in an innate will-to-power within the subject. While most novels work to thicken the line between the personal and the public, inheritance here expresses something within the subject that still feels impersonal. For Ablow, this makes the novel look like a critique of other novels. But more crucially, this tension between identity with the external and alienation from the internal is a pattern Brontë appears to be invested in for reasons of her own. It is, in essence, the structure of what it means in this novel to inherit something that refuses to become fully yours, the structure of being haunted.

The language of haunting in *Wuthering Heights* names something within the self that records a trace of actions and affect not fully one's own. Catherine Earnshaw, when she vents a tirade at Nelly about being trapped between the social necessity of marrying Edgar and a more primal connection to Heathcliff, spells out the alternate relations that can form on this basis.

[21] Rachel Ablow, *The Marriage of Minds: Reading Sympathy in the Victorian Marriage Plot* (Palo Alto: Stanford, 2007).

> Surely you and every body have a notion that there is, or should be, an existence of yours beyond you. What were the use of my creation if I were entirely contained here?... If all else perished, and *he* remained, I should still continue to be; and if all else remained, and he were annihilated, the Universe would turn to a mighty stranger… Nelly, I *am* Heathcliff—he's always, always in my mind—not as a pleasure, any more than I am always a pleasure to myself,—but as my own being—so don't talk of your separation again—it is impracticable. (82-3)

Catherine insists that she feels an identity with something that is not, strictly speaking, part of her. Experiencing Heathcliff always within herself, she occupies the position of the haunted. Yet she is also aware that she is herself doing the same kind of haunting within Heathcliff. This difficult to parse passage expresses something about the self in excess of the form of the individual, something that is the basis for a connection between individuals so immediate that even were Heathcliff to die, Catherine would still detect within herself a source of affect more his than hers. Her "own being" appears to have diffused itself beyond the boundaries of her body and mind, but whether this diffusion serves to render her identical to something outside herself or to alienate her from something within herself we are not told. The connection Catherine describes is involuntary and intrinsic to her nature, not attributable to motivations of pleasure or desire. The immediacy of this connection defies both existing theories of sympathy and incipient psychoanalytic models of intersubjectivity, both of which would explain the presence of other lives within the self as an erroneous displacement of one's own thoughts onto an external source.[22] It likewise unsettles the detachment and autonomy liberal theorists of government

[22] Scholarship on Enlightenment traditions of sympathy that structure thought in the Victorian era takes *reading*, by contrast to directly experiencing, as a model for the way intersubjectivity works. See Adela Pinch, *Strange Fits of Passion: Epistemologies of Emotion from Hume to Austen* (Palo Alto: Stanford, 1997). On late-Victorian and early twentieth-century psychoanalysis and its insistence on the coherence of a unified subject, see Gilles Deleuze and

attributed to the mind—but more on that below. Suffice it to say here that Catherine ascribes this internal haunting to anyone who experiences passion and consciousness in the same way she does ("surely you and every body…"). What does it mean that Brontë asks us to imagine that it is the rule and not the exception that individuals live on through other lives and find other lives living on within themselves?

Catherine and Heathcliff's connection represents the irruption of the species concept into the domain of character. As we will eventually observe when their dead bodies decompose into one another, their relations are predicated on the idea that they are composed of the same kind of flesh, such that their identity with one another overshoots the sexual co-mingling of bodies. Critics generally read Catherine and Heathcliff's dissolution into one another as a literalization of husband and wife becoming "one flesh" through marriage, which subsumes Catherine as an autonomous agent into a union built on the power asymmetry between genders.[23] The fusion Catherine experiences with Heathcliff, however, does not grow up from the space of gender difference between them, as dominant accounts of marriage and desire in the Victorian era would have it. If their mingling flesh realizes the connection that Catherine articulated to Nelly, then it literalizes something else entirely, a set of traits shared across the gender binary: a shared capacity for feeling the same feelings as one another, which Brontë locates in the body.

Although many studies of *Wuthering Heights* assimilate that connection to a sexual model of attraction, what this passage lays out is a sense of the heightened relations of *any* sort—whether desire, antagonism, or an almost compulsory fellow-feeling—among bodies understood

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Felix Guattari, "1914: One or Several Wolves?" in *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis: Minnesota, 1987).

[23] See Ablow, Claire Jarvis, *Exquisite Masochism: Marriage, Sex, and the Novel Form* (Baltimore: Johns Hopkins, 2016), and Sandra Gilbert and Susan Gubar's *The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination* (New Haven: Yale, 2000) for readings of *Wuthering Heights* based on that interpretation.

to be joined by a common nature. As Nelly's response makes clear, the ties forged among such bodies are coded as too new an idea to be comprehensible to her, let alone compatible with existing models of intersubjectivity: "If I can make any sense of your nonsense, Miss…it only goes to convince me that you are ignorant of the duties you undertake in marriage" (83). Catherine prefaces her tirade to Nelly by pointing out that although she is trapped by the social necessity of marrying Edgar Linton, it is not as simple as a choice between duty and desire. Heathcliff, she says, "comprehends in his person my feelings to Edgar and myself" (82). This amorphous and all-encompassing relationship between Catherine and Heathcliff provides a figure for what bodies share with one another in their elemental composition; and any kind of social union is imagined here as an attempt to manage and give form to the potential for passion that arises under that sign. Hers is not a choice between two suitors. Heathcliff is the place where she discovers the passions the body is capable of, and Edgar is but one form through which that potentiality could receive social expression and constraint.

For Catherine's marriage to Edgar is motivated, through a series of displacements, by the passion she feels for Heathcliff. No matter that "every Linton on the face of the earth might melt into nothing, before I consent to forsake Heathcliff," Catherine and Heathcliff's identity with one another could never, as Nelly's reaction to Catherine hints, entirely fit itself to the form of marriage: "if Heathcliff and I married, we should be beggars…whereas, if I marry Linton, I can aid Heathcliff to rise, and place him out of my brother's power." The necessity of conforming to acceptable social behavior is motivated by the fiercely embodied feelings Catherine finds within herself via Heathcliff, even as that acceptable social behavior imposes a low ceiling on that potential for passion.

When Catherine dies of her fever, Heathcliff discovers that they are as immediately present within one another as Catherine had felt them to be:

> Catherine Earnshaw, may you not rest, as long as I am living! You said I killed you—haunt me, then! The murdered *do* haunt their murderers. I believe—I know that ghosts *have* wandered on earth. Be with me always—take any form—drive me mad! only *do* not leave me in this abyss, where I cannot find you! Oh, God! it is unutterable! I *cannot* live without my life! I *cannot* live without my soul! (169)

The relations of partial identity between Catherine and Heathcliff indicate the insufficiency of self-enclosure as a template for parsing character in this text. Henry Staten has argued that *Wuthering Heights* leaves no room for transcendence of matter in its treatment of life and death, locating selfhood in "energetic flows of physiology"[24] Yet this radical embodiment Staten identifies appears to metastasize new paradoxes that the contemporary physiologists his study engages did not account for—namely, the way Catherine outlives her body, and the way Heathcliff's embodied life is integrally comprised of other lives external to the body.

Staten works under the assumption, shared by many Victorian physiologists, that the network of nerves in the body was self-contained, an object of inquiry that could be studied through isolated specimens.[25] Absent from this novel, however, is the detailed attention to theories of nerves that Staten finds in Charlotte Brontë's novels and imports to her sister's. Although species scientists and physiologists jointly dismissed certain older models of mind, they had in reality few points of historical contact with one another. In particular, their respective disciplines sharply differed from one another on the question of whether human life was, as

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[24] Henry Staten, *Spirit Becomes Matter: The Brontës, George Eliot, Nietzsche* (Oxford, 2014), 4.
[25] See Nicholas Dames, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, 2007), whose illustrations of Victorian conceptions of the nervous system demonstrate that premise, and whose argument similarly implies the body's individuation by casting novel reading as a form of mediation that was required for such bodies to be calibrated collectively.

physiologists maintained, to be found in individuated bodies, or, as species scientists believed, a collective phenomenon whose true nature only became legible when studied in the aggregate. Furthermore, whereas species scientists put reproduction in the limelight, physiologists had a tendency to drain the nervous system of its sexuality or any way in which bodies might merge.[26] In *Wuthering Heights*, when Brontë reduces human subjectivity to its material basis, she introduces a whole new range of ways in which bodies are interconnected with one another, aligning Brontë's materialism emphatically with the species rather than physiology. In finding himself subject to affect that both comprises him yet is not properly his own, Heathcliff declares himself haunted, and *Wuthering Heights* declares such haunting to be conjured from within the body.

The novel ultimately displaces these features of the flesh onto the ghosts who haunt the narrative. Almost immediately on arriving in Yorkshire, Lockwood is visited in an extraordinary dream by Catherine's ghost who communicates to him more about her past than Lockwood actually knew at the time.

> …knocking my knuckles through the glass, and stretching an arm out to seize the importunate branch…my fingers closed on the fingers of a little, ice-cold hand!
>
> …a most melancholy voice sobbed, "Let me in—let me in!"
>
> "Who are you?" I asked, struggling, meanwhile, to disengage myself.

[26] As Charles Darwin's correspondence contained in *The Darwin Project* at the Cambridge University Library goes to show, Darwin was less receptive to the ideas of George Combe, a prominent phrenologist, than to those of physiologists such as William Benjamin Carpenter, Alexander Bain, and Thomas Henry Huxley. See Darwin, Charles, "Influence of the form of the brain on the character of fowls," *The Field, the Farm, the Garden, the Country Gentleman's Newspaper*, 17, (May 1861): 383, and Darwin Correspondence Project, "Letter no. 3303," accessed on 30 April 2019, http://www.darwinproject.ac.uk/DCP-LETT-3303. Evolutionary theory depended on the distinction between phrenology, which located character in the material of the brain, and physiology, which largely supplanted phrenology and located cognition in a network of nerves running throughout the body. In placing more importance in the body posited by physiologists than the phrenologically conceived subject, evolutionary theorists seem drawn to a body that acts involuntarily, without the control of consciousness or will.

> "Catherine Linton," it replied, shiveringly (why did I think of *Linton*? I had read *Earnshaw* twenty times for Linton). "I'm come home, I'd lost my way on the moor!"
>
> …Terror made me cruel; and, finding it useless to attempt shaking the creature off, I pulled its wrist on to the broken pane, and rubbed it to and fro till the blood ran down and soaked the bed-clothes: still it wailed, "Let me in!...It's twenty years…twenty years I've been a waif for twenty years!" (Brontë 25)

It is worth highlighting the sense of inextricability and heightened affect this scene confers upon Lockwood's otherwise detached body, which incites him to involuntary action that he cannot properly account for as the product of his own intent. More than anything, though, his ability to generate from within himself the name Catherine Linton and a rough outline of her story stands out here. The haunting that originated within the body for Heathcliff appears to have disembodied itself and taken on the mystical properties that have led many readers to regard this tale of unpleasant people behaving unpleasantly as a sweeping love story. But a clear signal Brontë sends regarding this dream goes unnoticed by the terms of that reading. As Lockwood falls asleep with Catherine's diary open, he half notices a few scribbles he cannot explain: "This writing…was nothing but a name repeated in all kinds of characters, large and small—*Catherine Earnshaw*, here and there varied to *Catherine Heathcliff*, and then again to *Catherine Linton*. In vapid listlessness I leant my head against the window and continued spelling over Catherine Earnshaw—Heathcliff—Linton, till my eyes closed" (19-20). To borrow a brief history of body-sciences from the intellectual historian David Bates, in the first half of the nineteenth century *genius* and other spiritualist categories of thought were gradually coming to be understood as chance associations between otherwise unrelated sensations generated strictly by and within the machinery of the embodied mind: "In early nineteenth-century thinking, the interventional

character of insight, its structure as a gift from outside the operations of the normal mind, was internalized, assigned to the murky, and irrational, domain of the unconscious" where it became "aligned…with instinctive powers of the body." "The *unconscious* activity of the nervous system," Bates writes, "was continually generating responses, integrating memories, and producing automatisms. And as evolutionary theories in the nineteenth century took hold, the nervous system could also be understood as the inheritor of a whole evolutionary history of learned responses" (Bates 158-9). The automatic association of ideas that aren't overtly related reveal a deeper, inherited pattern of association that interprets signals from an environment and generates reactions independent of the mind (what we now call instinct). As Bates shows, prior to the nineteenth century, spiritualist discourses and dualist models of mind attributed such insight to metaphysical sources external to the subject. In the early Victorian era, these "geniuses" ceased to be imagined as external spirits guiding thought, and were instead internalized as a property of the brain; the category of chance mental associations came to be governed by an unconscious inheritance within the body.

The body, once understood to contain the features of a species, became the source of a kind of secular magic—a haunting that can be explained from within matter rather than from without. Lockwood's unconscious association, as he literally slips into unconsciousness, between Catherine's different avatars correctly interprets the affective environment that appeared so alien to his conscious attempts to navigate it. Catherine and Heathcliff's past constitutes a melodrama whose plot, it seems, Lockwood's body already knows in its broad outline, despite his ignorance of the particular actors involved—something that guides the unconscious cognition of his body in the way of a species inheritance.

Before Darwin

The topic of the human species, and the way it related familiar emotions to unfamiliar models of inheritance, was a matter of prominent and contentious debate during the period of *Wuthering Heights*' composition. As James A. Secord illustrates, the anonymous publication of Robert Chambers' *Vestiges of the Natural History of Creation* (1844) saturated every level of the reading public with its account of Mankind's development from particulate matter. The book's extraordinarily wide reception, Secord argues, pointed not only to the salience of species thinking to existing political and social discussions, but also to the gripping nature of the story it tells, which caused readers to pick it up as the latest novel and even attribute its authorship to several prominent novelists. Gillian Beer refers to these years immediately prior to the explosion of evolutionary theories in the 1850s as a moment of particular importance for the uptake of evolution into popular consciousness, largely because evolution was at that point still in the province of popular, rather than strictly scientific, discourse: "the phase when 'a fact is not quite a scientific fact at all' and when 'the remnant of the mythical' is at its most manifest" (Beer 2). The literary sphere in the first half of the century was one of the most active arenas for explorations of the species concept, and of particular importance to the connotation of species life that appears to have made its way into *Wuthering Heights* through a primarily literary heritage.[27]

Charlotte Dacre's *Zofloya* (1806), for instance, uses species imagery to re-think whether gratifying desires produces good or bad effects, and how gratifying those desires repositions us in relation to the line between human and animal life.[28] Throughout that novel, self-reflection and introspection are figured as a surprisingly dangerous pastime, revealing impulses and susceptibilities so alien to moral consciousness that characters are frightened to turn their gazes

[27] On the intertwined histories and functions of natural science and literature in the nineteenth century, see Garrett Stewart's "The Science of British Literature, 1819, 1851, 1882-94," *PMLA* 117, no. 3 (May 2002): 428-432.
[28] Charlotte Dacre, *Zofloya: or the Moor*, ed. Kim Ian Michasiw (Oxford, 2008).

inward. A young girl born to a wealthy family and indulgent parents provides a kind of test case for what human nature left unchecked will lead to. Systematically gratifying the innermost desires of an ordinary, unremarkable human subject produces an extraordinary degeneration from a childish pursuit of vanity to a string of murders. Whereas earlier Gothic fiction in the eighteenth century commonly located the motivation for such actions either in a character perverted by extraordinary circumstances or else externalized in the seductions of a demon-figure, *Zofloya* modifies that convention by first killing off the demon-like figure before any seduction occurs, and only bringing him back once the main character has discovered certain desires within herself. Dacre relocates the Gothic within the subject, an evil conjured from human nature. Allowing the inclinations native to Mankind to operate unrestrained makes Dacre's anti-heroine wind up by the end of the narrative exiled from society, living below ground in caves where wild animals and a gang of robbers share space and modes of survival. Dacre's moral critique arises from her sense that mankind contained animal life within, and accordingly, the novel culminates in this degraded parody of animal life as an expression of human tendencies towards vice.

This persistent view of the human animal as an object of moral outrage fed into an equally persistent "discord," as Tennyson put it, between modern society and natural life.[29] Tennyson's 1847 "The Princess" nests the speaker in a series of timescales, detailing artifacts from one family's lineage within the history of human culture, spliced into the timeline of natural history: "Carved stones of the Abbey-ruin in the park,/ Huge Ammonites, and the first bones of Time;/…The cursed Malayan crease, and battle-clubs/ From the isles of palm: and higher on the walls,/ Betwixt the monstrous horns of elk and deer,/ His own forefathers' arms and armour

[29] Alfred Tennyson, "In Memoriam A.H.H." in *Alfred Tennyson: The Major Works*, ed. Adam Roberts (Oxford, 2009), 237.

hung."[30] The violence that progressivist models of history would displace onto the pre-social stages of this timeline begin to creep up on the speaker, steadily encroaching through history to overtake particular individuals from living memory.[31] Tennyson's famous lines on "Nature, red in tooth and claw" from "In Memoriam A.H.H.," which he wrote during the years 1833-49, similarly place human life within the timeline of natural history in order to confront spiritual and sentimentalist notions of Mankind:

> …and he, shall he,
>
> Man, her last work, who seem'd so fair,
>
> …
>
> Who trusted God was love indeed
>
> And love Creation's final law—
>
> Tho' Nature, red in tooth and claw
>
> With ravine, shriek'd against his creed—
>
> …
>
> Be blown about the desert dust,
>
> …a monster, then, a dream,
>
> A discord. Dragons of the prime,
>
> That tare each other in their slime[32]

Although so widely assumed to refer to emergent scientific naturalism that it has become a tag-line for evolution, "Nature, red in tooth and claw" in its original context describes the version of nature that stood in binary opposition to an older notion of Mankind as spiritually distinct from

[30] Tennyson, "Princess," 117.
[31] George C. Stocking discusses the contradictions between Whiggish historiography and the conclusions of the human sciences. See Stocking, *Victorian Anthropology* (New York: Free Press, 1987), 30-40.
[32] Tennyson, "In Memoriam," 236.

animal life. This personified and caricatured Nature is the kind of defunct natural philosophy that offsets Man as a being "so fair" capable of obeying higher laws. When humanity is reduced to body—something that eventually becomes "desert dust"—however, that exceptionalism departs; "Nature, red in tooth and claw" migrates into the category of humanity, temporally mapped onto a distant past whose inheritance threatens to erupt into the present as "discord" with social forms built around a more exalted idea of human nature. Whereas Dacre viewed the elemental materials of mankind from the perspective of an older moral skepticism about gratifying desires, Tennyson looks backward with despair at moral values that seem to be receding into obsolescence in the face of scientific progress. He re-casts human passions in terms of vital force, natural energy in the body that finds expression in acts of sex or violence elemental to human and animal life alike.

Debate within scientific circles centered on whether those elemental passions represented the final (or near-final) step in a sequence of evolutionary development or were fixed structures endemic to each species.[33] Chambers and Jean Baptiste de Lamarck were among the proponents, most widely read in Britain, of the gradual transmutation of species over time. Chambers' *Vestiges of the Natural History of Creation* narrated the development of increasingly complicated forms of life from the teleological perspective of Mankind's emergence.[34] The ability to track the progress of near-human and then finally human emotions was, for Chambers, a testament to the "Divine Author" at work in this process. Lamarck, who had stopped short of applying his thinking to humans, emphasized the role of habitat in determining the course of evolutionary development in his 1809 *Philosophie Zoologique*, which enjoyed perhaps more

[33] See Robert J. Richards, *The Romantic Conception of Life: Science and Philosophy in the Age of Goethe* (Chicago, 2002), 526-33.
[34] Robert Chambers, *Vestiges of the Natural History of Creation and Other Evolutionary Writings*, ed. James A. Secord (Chicago, 1994).

attention in Britain than it received in France.[35] Conversely, George Cuvier and Richard Owen were among many who contested the evolutionary premise of species science, positing instead an elemental structure shared among all organisms of a single species that remained static over time—a theoretical position that left room for natural theologians to imagine a divine idea as the source of that structure.[36] Those structures formed, according to this logic that viewed species as an archetype, through catastrophic natural events that created new conditions under which certain structures made sense and relegated others to extinction. What both the evolutionary and the fixed-structure schools of thought agree on is that a long historical past is coiled within the flesh, whether a chain of development that leads back to animal origins, or the cyclical intervals between pseudo-scriptural events causing extinction and repopulation.

By contrast, the practice of anthropology that was emerging at the time of the novel's publication stressed the discontinuity between past and present. As George Stocking explains, anthropology was as yet in nascent form in the 1840s, as a set of attitudes towards the historical past accumulating in multiple discourses.[37] What tied these discussions together was a prevailing idea of "civilization" as an effect of breaking off from primitivism, by contrast to Enlightenment ideals of harnessing primitivism, notably through figures like the noble savage. Literary criticism has not explored in any depth the relationship between fiction and early-Victorian anthropology, preferring to focus instead on the flourishing of ethnographic consciousness following the Great Exhibition's collation of cultural material from around the empire in the 1850s. The most influential scholarship on literature of Brontë's era and anthropology argues that novels authored

[35] Jean-Baptiste de Lamarck, *Philosophie Zoologique*, ed. André Pichot (Paris: Mass Market, 1997). On Lamarck's influence in Britain, see Stephen Jay Gould, "Shades of Lamarck," *Natural History* 88, no. 8: 22-28, as well as Daniel Brown's discussion of Lamarck's literary influence in Britain in his "Victorian Poetry and Science" in *The Cambridge Companion to Victorian Poetry*, ed. Joseph Bristow (Cambridge, 2006): 137-158.
[36] See Laura Otis's introductory essay on evolution in her *Literature and Science in the Nineteenth Century: An Anthology*, ed. Laura Otis (Oxford, 2009): 235-239.
[37] See Stocking, "The Idea of Civilization Before the Crystal Palace (1750-1850)" in *Victorian Anthropology*, where he explains how "civilization" was constituted by political economy, historiography, and moral philosophy.

key ethnographic methodologies that would be employed later in the century, such as a "participant-observer," or a detached European perspective paired with an embedded native informant. Late-Victorian anthropology's literary heritage, so this scholarship urges, depends on the early Victorian novel to espouse a model of mental autonomy that scrutinizes culture from a detached perspective.[38] In Dacre's imaginary, however, it is precisely our inability to extricate ourselves from self-interest that drags humans down to the level of animal life. The literary heritage of the species concept undermines the idea that primitivism was pre-historic, and, as Tennyson's "The Princess" would indicate, viewed the natural thirst for bloodshed as the primary engine of cultural history. In departing from the contemporaneous anthropological consensus that past and present were discontinuous—in making the past continually intrude on and re-shape the present—*Wuthering Heights* makes such detachment impossible to sustain.

"Cultivated detachment" was central not only to anthropology later in the century, but also to theories of liberal government throughout the Victorian era.[39] The capacity to detach from one's own feelings and interests was made central, by many liberal theorists, to the right to govern, which underpinned justifications for colonial rule and divisions among social classes. By tampering with the relationship between mind and body that allowed these theories to take hold, Brontë's use of the species concept undoes the neat distinction between classes and even races, disfiguring templates for domestic and social order. Charles Percy Sanger's classic essay "The Structure of *Wuthering Heights*" details the way Brontë's novel meticulously observes existing laws and conventions structuring contemporary British society; yet somehow, as many have pointed out, *Wuthering Heights* presents a thoroughly disfigured version of that society. Illuminating the presence of species thinking in the novel addresses precisely that paradox: it is

[38] See Buzard, "Cultures and Autoethnography" in *Disorienting Fictions*.
[39] See especially Anderson, *The Powers of Distance*, in particular her chapter on Matthew Arnold.

the story of how the kind of inheritance flowing through a fleshly, impassioned body meets and deforms the synthetic, socio-cultural attempts to govern that body from without.

Elemental Structures

Why capture this inheritance as a kind of haunting? *Wuthering Heights* does not do so, as one might logically expect, with the effect of rendering those relations phobic so much as to imbue the scene of solitude with a sudden volatility. The depopulated setting of the Yorkshire moors homes in on the way the crowded conditions associated with the Victorian novel at large get replicated in this novel within the flesh of the isolated body. Whereas Romantic literature just a generation before Brontë published *Wuthering Heights* had attached particular importance to solitary self-reflection as necessary for certain kinds of cognitive development, in *Wuthering Heights* solitude is transformed into the experience of coming apart, of discovering within yourself something that is not fully individuated. Hermits and reclusive philosophers may have seemed plausible figures for temperance and self-abnegation in the eighteenth-century novel, but literary history was not long in inverting this value, as solitary conditions increasingly became the site of perversion born of unrestrained self-gratification in the Victorian imaginary. As Arthur Conan Doyle's Sherlock Holmes remarks in 1892, "the lowest and vilest alleys in London do not present a more dreadful record of sin than does the smiling and beautiful countryside…the only thought that comes to me is a feeling of [its] isolation… Think of the deeds of hellish cruelty, the hidden wickedness which may go on, year in, year out, in such places, and none the wiser" (Conan Doyle 369). By the end of the century, isolation no longer affords the conditions for mental growth that could not otherwise happen, and instead becomes the place where undesirable traits of humanity in the aggregate find expression in the individual. By offering an

unusually sustained look at individuals in solitude, *Wuthering Heights* offers one explanation for this transformation.

The status of the species concept underwent an internal transformation in the first half of the nineteenth century, leading up to the proliferation of evolutionary theories in the 1850s. To eighteenth-century taxonomists, "species" meant something like "kind," or an abstract set of features that was identical to any given specimen.[40] By contrast, in the 1850s, "species" gestured more to the swarm of actual bodies united by a taxonomic sign. The older sense of "species" derived from its connotation in seventeenth-century philosophy, which appears in the OED as "appearance, outward form." Species, in that line of thinking, was a set of properties particular to an individual specimen that allowed any natural body to be identified and classified within a taxonomic system. This sense of "species" as a set of traits self-contained within the isolated specimen was principally a synchronic mode of classification, meaning that a specimen and its properties were not attached to any diachronic narrative of how they developed that way. The later nineteenth-century connotation, conversely, emerged in concert with the rise of evolutionary theory, which decoupled a specimen's most elemental properties from the specimen itself and associated them instead with a long process of inheritance common to large numbers of bodies grouped together into a collective species.

Wuthering Heights seems to occupy a liminal stage of this transformation, when an isolated specimen begins to be haunted by a larger category operating within its structures and impulses. Even in solitude, individuals register a ghostly blur within themselves as their particularized features shade into the elemental structures that join them together into a single

[40] In addition to Arthur Lovejoy's "Buffon and the Problem of Species," *Popular Science Monthly* 79 (December 1911), see Heather Keenleyside's discussion of "species" in the work of Jonathan Swift, *Animals and Other People: Literary Forms and Living Beings in the Long Eighteenth Century* (Philadelphia: Pennsylvania, 2016) and Dahlia Porter's "Specimen Poetics: Botany, Reanimation, and the Romantic Collection" *Representations* 139 (Summer 2017): 60-94.

species. In Catherine and Heathcliff's tempestuous but forestalled attraction, *Wuthering Heights* seeks to craft a romance out of those elemental structures.

It is as though Catherine and Heathcliff act out a primordial melodrama of the human passions that, in haunting the rest of the narrative and re-enacting itself on other bodies, begins to define the flesh as the seat of essentially uniform tendencies. The febrile illnesses, male-to-male vendettas, and male-to-female seductions and confinements that structure the original lives of Catherine, Heathcliff, and Edgar cycle back around throughout the successive generations. Through the uncanny repetition and intensification of certain kinds of affect that anthropologists would come to regard as the pre-social material of human culture—specifically, the relationship between sex and violence—those natural energies bubble over from the body to erode social form. When Heathcliff ruptures the normal rules governing social interaction in the drawing room to engage Edgar in a physical fight, that fight is itself the resurfacing of a similar brawl from when they were children, with an andiron taking the place of "a tureen of hot apple-sauce," as domestic space seems increasingly unable to domesticate behavior (59). This progression extends itself when Heathcliff's violent enmity with Edgar is recreated in his hostility towards Hindley Earnshaw, who similarly transforms the interior of the household when he lies in wait to kill Heathcliff with pistol and blade, which leaves Hindley lying beaten on the floor gushing blood. As the tureen is replaced by the andiron and then by the pistol, the affect that finds expression through each of these objects bursts the constraints of social form until that same scenario being repeated has lost all trace of its domestic context and takes on a savagery that far exceeds any apparent motive. Similar lines of continuity form diachronically through the narrative and across generations: a young Catherine, caught trespassing on the Linton estate, is seized as an intruder and taken by force into the house, only to have the scene turn into a kind of

seduction when the Lintons learn her identity and shower her with attention that wins her over to Edgar; these same terms are reversed in Heathcliff's courtship of Linton's sister, seducing her first, only to subject her to brutal mistreatment and imprisonment; and seduction and confinement finally collapse into each other in the next generation, when the new Cathy is held prisoner in Wuthering Heights until she agrees to a marriage. If Victorian anthropology designated the point at which sex and violence diverged from one another and sex became subject to rules of exchange, *Wuthering Heights* reverses that process of cultural development.[41] Heathcliff marks the primitive, pre-social point at which sex and violence met before culture teased them apart.

The return of febrile illness at points throughout the novel similarly give the impression of past events uncannily cycling back around, as first Mrs. Earnshaw, then Hindley's wife Frances, Isabella Linton, and Catherine herself are all claimed by the same disease in an intergenerational sequence. I want to emphasize, in particular, however, one additional case of fever that reaches outside this system of naming to define the scope of inheritance as operating at the level of the flesh more broadly. The novel's frame-tale structure positions Lockwood outside the narrative that Nelly recounts many years later. His detachment from the story gets compromised at points during his first arrival, before Nelly's frame narrative is set up: the way Lockwood finds his attention arrested by Heathcliff's past, and his mental entanglement in the story when Catherine's ghost seizes him and won't let go. Yet those involuntary engagements with this past are purely mental, exciting his curiosity in a way that leads critics to read the ensuring frame-tale as a figure for novel-reading. This entanglement takes a quantum leap off the page onto Lockwood's body, however, crumbling the boundary between the past and the present,

[41] On the relationship of the exchange of women to the development of social order, see Carole Pateman, *The Sexual Contract* (Palo Alto: Stanford, 1988).

and between insider and outsider somewhat later in the novel. Snowbound at Heathcliff's for a night, Lockwood flips through the now-dead Catherine's diary while sleeping in her old room and reads with interest about her relations with Heathcliff. He leaves that bed having caught the very fever that killed her, such that Catherine and Heathcliff's story, which he encounters like a mythic past, interpellates him through the body. His cosmopolitan position as an outsider to the novel's system of naming cannot be sustained, as he is brought into that system through the logic of contagion. It is as though Catherine and Heathcliff model desire and hatred at such a pitch that it becomes asocial and tips over as fever into the body, where those affective patterns spread, contagion-like, and live on. What social organization does this mode of embodied affect produce?

Entanglement

Wuthering Heights, in completely bewildering the normative expectations Lockwood brings to the novel, authors a community that requires Lockwood and readers alike to adopt a proto-anthropological mode of observation and analysis. The early nineteenth-century novel's role in producing the "culture concept," which anthropologists later in the century took as a blueprint for observing other races, has been well-documented.[42] James Buzard argues that certain aspects of the novel form structured experience in a way that strikingly resembles—and ultimately was responsible for producing—the anthropological technique known as the "participant-observer." This technique of cultural analysis involved anthropologists situating themselves at once inside and outside the customs of the society being analyzed—participating by way of native informants in the practices and beliefs of a culture while maintaining the critical detachment of an outsider. The practice has its source, Buzard argues, in the narrative strategies

[42] See Christopher Herbert, *Culture and Anomie: Ethnographic Imagination in the Nineteenth Century* (Chicago, 1991).

of novels that illuminate a culture from the dual perspectives of an experiential character embedded in the present and a narrating voice that speaks from a position of detachment. *Wuthering Heights* appears to instantiate this argument uncannily well: Lockwood consults Nelly's knowledge as a native to make sense of a community that is manifestly part of a past that he has no access to, in an effort to understand why his new neighbors' actions and affect seem shaped by something other than the social forms he expects to find. Unlike most novels, however, this paired inside/outside perspective is placed in a Russian doll-like series of such pairings, which begins to make the "outside" position look more and more like an illusion. Nelly herself ceases to be the embedded "native" perspective that Lockwood consults, and instead assumes the role of a detached narrator in her own right, speaking with critical distance about her past experiential self. Scholars have been quick to note that Nelly is a most unreliable narrator, however, as even her detached reflections to Lockwood are manifestly skewed by her place within the story she tells—by a past that is not actually over.[43] And Lockwood himself, emblematic of the outside observer Buzard describes, is drawn into that past through the fever and through the dream that makes Catherine and Heathcliff's past seem to come from within him as much as it does from without. Thus Lockwood in turn is split into that same pairing of an experiential self and a narratorial voice that speaks with no more reliability than Nelly.

In placing high value on mental detachment, Victorian anthropology wove itself into a long history of liberalism that predicated itself on the capacity of individuals to detach from their natural self-interest and reattach themselves to the synthetic interests of abstractions such as the state. Julia Reinhard Lupton locates the origins of liberal government in early modern discourses that coaxed individuals to cut ties with in-born associations like ethnicity and acknowledge national belonging as their defining association. In the nineteenth century, John Stuart Mill made

[43] On the unreliability of Nelly's narration, see Staten, *Spirit*, who also discusses Lockwood's unreliability.

detachment central to the question of who held the right to govern: in contrast to working-class competition that fueled narrow self-interest, what Mill viewed as a distinctly middle-class talent for thinking abstractly about interests other than one's own became justification for restrictions on colonial and working-class rights. As Amanda Anderson argues, "cultivated detachment" from regional and cultural attachments over the course of the Victorian era facilitated graceful movement through different cultural contexts (Anderson 5). The detachment of the participant-observer, then, was not merely a tool of cultural analysis; it was key to both class and colonial hierarchy. By making postures of cosmopolitan detachment impossible to sustain, *Wuthering Heights* points to species life as the source of sticky affective connections that prevent those hierarchies from mapping onto and organizing this novel's social body.

Lockwood's arrival at Wuthering Heights reads like a farce written at the expense of his urbane cosmopolitanism, which utterly fails as a way of allowing him to move freely through the heterogeneous cultural spaces composing the British nation. For all Lockwood's attempts at sympathy with the members of Heathcliff's provincial household, and for all his attempts at overcoming his discomfort in a drafty, disordered house, it takes no more than a few pages for Lockwood to match Heathcliff's temper "with incoherent threats of retaliation that, in their indefinite depth of virulency, smacked of King Lear. The vehemence of [his] agitation brought on a copious bleeding at the nose, and still Heathcliff laughed" (Brontë 17). In parodic foreshadowing of Catherine and Heathcliff's passion, this scene similarly approaches that point at which violent passion tips over into the body. Although the narrating voice perfectly maintains an ironized distance from his own experiences, the experiential character finds himself stripped of self-control and powers of speech, inflamed by the very passion he was attempting to mollify in Heathcliff. Anna Gibson's recent "Charlotte Brontë's First Person" reads such splitting up of

the narrating voice and the embedded character as a conflict between competing models of explaining subjectivity in the nineteenth century: "a stable, autonomous 'first' person" versus "physiological accounts of the self as composite and processural…a product of physically rendered faculties."[44] If Buzard maps these two narrative modes onto two distinct figures—the detached European narrator and the native informant—then Gibson encloses both voices within a single subject. While Gibson speaks only of the difference between mind and body in Charlotte Brontë's novel, we might go a step further in Emily's by identifying the level of the body with what Buzard would call the "primitive" voice.

Lockwood's susceptibility to fever and surrounding affect makes him a participant within violent social dynamics that resist his best attempts to understand them. On first entering Wuthering Heights, Lockwood encounters such extreme domestic disorder that he can only attribute it to the absence of any female presence to preside over the proper cultural regimens of an English household: servants who refuse to answer doors, dogs ready to attack visitors, a dirty and comfortless kitchen, and, in Heathcliff, a host eager for an opportunity of abusing his guests. When Lockwood discovers the younger Cathy residing in the house, then, that disorder takes on a deeper mystery—still more so when he repeatedly tries and fails to identify her relation to Heathcliff and her role in his household. Within this illegible social terrain, Lockwood's easy manners and attempts at charm produce nothing but humiliation after humiliation:

> "Ah, your favourites are among these!" I continued, turning to an obscure cushion full of something like cats. "A strange choice of favourites," she observed scornfully. Unluckily, it was a heap of dead rabbits.
>
> …

[44] Anna Gibson, "Charlotte Brontë's First Person," *Narrative* 25, no. 2 (May 2017), 214.

> The cannisters were almost out of her reach; I made a motion to aid her; she turned upon me as a miser might turn if any one attempted to assist him in counting his gold. "I don't want your help," she snapped, "I can get them for myself."
>
> …
>
> "Were you asked to tea?" she demanded… "I should be glad to have a cup," I answered. "Were you asked?" she repeated. "No," I said, half smiling. "You are the proper person to ask me." She flung the tea back, spoon and all. (11)

These are the cultural dynamics that render Lockwood's powers of cosmopolitanism useless. Cosmopolitanism, it appears, is only effective as a mode of interaction in societies that conform to a certain abstract template. Heathcliff's household systematically differentiates itself from any normative template by throwing into disorder the laws of hospitality, legible domestic typologies, and clear lines of division between social classes. The inexplicable inclusion in Heathcliff's household of a young man dressed and addressed as a farm laborer with hostile manners disfigures the form of the family beyond recognition. Coupled with the unchecked insolence of the few servants in attendance, the blurring of class lines creates an environment in which Lockwood's attempts at humor are misread as insults and immorality. Whereas Lockwood had originally imagined he would have to take care not to make Cathy fall in love with his good manners and urbane appearance, his visit instead winds up with him pinned on the floor by the dogs when suspected of stealing, while Heathcliff laughs at his inarticulate rage and bleeding nose. His recourse, in encountering a region evidently too alien to "Britishness" for his manners to translate, is to adopt the anthropological method of interviewing Nelly Dean, only to find himself sliding from that detached position into the story itself.

The contagious affect that spreads across the boundaries of Lockwood's detachment similarly seep through the boundaries of cultural exclusion that are continually put up around Heathcliff. Critics and characters alike are quick to label Heathcliff with an almost comically large number of ways of designating cultural outsiders. When Mr. Earnshaw returns from London with the filthy orphan he reports having found in the street, Heathcliff is instantly labelled a gypsy by the rest of the household, and Nelly claims he entered the house repeating "over and over again some gibberish that nobody could understand" (37). To the neighbors, he is likely a member of a gang of thieves, to Hindley an "imp of Satan" (39); later in life, Nelly calls him "a ghoul, or vampire" (30). Critics have similarly overdetermined Brontë's secret motivation for giving him outcast status, explaining his failure to incorporate himself into normal social behavior by reading him as Mr. Earnshaw's bastard child, an Irish immigrant displaced by famine, and an avatar of Malthus's surplus population. And, indeed, when Heathcliff mourns Catherine's death, Brontë connects his antisocial behavior to its closest cognate within theories of political personhood. Nelly tells us that his convulsive grief "hardly moved [her] compassion—it appalled [her]" (169), placing Heathcliff in the position of Adam Smith's social outcast, someone animated by feelings hostile to the system of sympathy whose "furious behavior…is more likely to exasperate us against himself than against his enemies…we are shocked at his grief…we are disobliged even with his joy."[45] Passions unmediated through an imagined social perspective, Smith writes, "excite no sort of sympathy but, before we are acquainted with what gave occasion to them, serve rather to disgust and provoke us against them" (Smith 21). Affective connections at that pitch prove disruptive to the temperate

[45] Adam Smith, *The Theory of Moral Sentiments*, ed. Amartya Sen and Ryan Patrick Hanley (New York: Penguin, 2010), 15.

subjectivity Smith prescribes for the sake of "the harmony of society."[46] To be a body in this novel is to experience relations that de-individuate, even as they also produce social isolation. Yet it is Heathcliff, on whom Brontë heaps nearly every imaginable term of exclusion, who Catherine says is in some way included in her own flesh, and it is Heathcliff who manages to make all around him mirror his own violent affect. He inverts Smithian sympathy, embodying affect that, by virtue of being too volatile for sympathy to occur, provokes reciprocal anger and revulsion in those around him. Whereas Smith is at pains to emphasize that sympathy does not actually transfuse feelings from one body directly to another, Catherine and Heathcliff's relations of identity and the contagious spread of affect throughout the novel occupy sympathy's negative spaces.

The transfusion of affect from body to body undercuts principles of social organization that depend on consciousness detached from context. *Wuthering Heights* humiliates that cosmopolitan ideal by drawing the body irresistibly into a sticky web of affective relations that express themselves as asocial dynamics muddling distinctions between classes, genders, and the ethnographic threshold of insider/outsider. By very deliberately factoring out such distinctions before her readers' eyes, Brontë leaves us with structures of feeling that appear to be universal to the human race. She locates these elemental structures of human feeling in a mythic past, which, in continually recurring throughout the novel's collective flesh, generates behavior that is explicable more by proto-anthropological models of cultural analysis than in terms of liberal subjectivity. In effect, the novel works with bodies that are the seat of essentially uniform tendencies, which fuse individuals together not only horizontally within a present, but also vertically in an inheritance that unfolds over time. By capturing these dimensions of embodiment

[46] Smith, *Theory*, 28.

that exceed individuality as a kind of haunting, *Wuthering Heights* performs the double move of thoroughly materializing the human soul and thus re-enchanting the flesh that houses it.

CHAPTER THREE

Novels Precarious; or, How to Craft Character from a Social Organism (George Eliot)

To ask what the relationship is between physiological sciences of the body and statistical sciences of collectivity in mid-Victorian Britain is really to ask how and why two standards of literary realism came apart—and what George Eliot did to put them back together. The late 1840s and 1850s saw the rise of both statistical sociology and clinical physiology, each of which sought to explain human behavior by way of natural or quasi-natural laws. Statisticians, on the one hand, quantified the social behavior of the population and, on observing seemingly invariable patterns of regularity in that data, posited a "law of large numbers" that predicted future rates of action would remain locked into particular ratios to one another. Irrespective of the conscious choices of individual actors, social statistics maintained, when described in terms of simple statistical frequency empirical phenomena could be predicted by the statistical models originally designed merely to represent them.[1] Physiologists, on the other hand, through experiments with electrical stimuli on specimens whose brains had been removed, concluded that the bulk of cognition occurred in nerve-centers distributed throughout the body that were capable of processing and responding to sensations before consciousness had time to exercise itself.[2] Although physiologists used statistical methods to generalize their findings and sociologists took cues from physiology in determining how to measure aspects of a population related to its health, the two schools of thought operated at such different scales that they virtually never contested

[1] For authoritative accounts of the rise of statistical thinking across nineteenth-century Europe, see Ian Hacking, *The Taming of Chance* (Cambridge, 1990) and Alain Desrosières, *The Politics of Large Numbers: A History of Statistical Reasoning*, trans. Camille Naish (Cambridge: Harvard, 2002).

[2] On the development of physiological sciences in Victorian Britain, see Rick Rylance, *Victorian Psychology and British Culture, 1850-1880* (New York: Oxford, 2000). For a review of the major players and their place within a longer history of science, see Lorraine Daston, "British Responses to Psycho-Physiology," *Isis* 69, no. 2 (June 1978): 192-208.

one another philosophically or politically over their respective explanations of human behavior. One place where they did come into contact was in fiction of the era, which, in working both with representations at the scale of sociology and with the sensory lives of individuals, was pulled into both jurisdictions at once. In seeking to explain action in terms of absolute objectivity—reducing human behavior to its biological source or its numerical representation—both physiology and statistics claimed the status of fact. As a result, they each came to set powerful new standards for what counted as realistic fictional representations of social experience and the production of interiority.

George Eliot's 1856 essay "The Natural History of German Life" attributes a crisis in the production of Victorian fiction to a conflict between the two.[3] By transforming the disorder of the masses into orderly rates of collective behavior, social statistics detached action from the sensory conditions and sedimented habits through which a nervous system produces interiority as it interacts with its environment. The statistical enumeration of social data has the lamentable effect of abstracting actions from their actual causes, whether the material context in which they occurred or the habituated dispositions of the actors involved. There is a tendency among critics today to freeze Eliot's writing career at this stage of her thinking, casting this early essay as the key to her mode of psychological portraiture throughout her later fiction.[4] As I will argue, however, Eliot's Gothic 1860 novella *The Lifted Veil* clearly shows her evolving thinking

[3] George Eliot, "The Natural History of German Life," *Westminster Review* (1856): 141-177. Further references are cited parenthetically.

[4] See in particular George Levine, "Determinism and Responsibility in the Works of George Eliot," *PMLA* 77, no. 2 (June 1962): 268-279, and Emily Steinlight, "Why Maggie Tulliver Had To Be Killed," in *Rancière and Literature*, ed. Grace Hellyer and Julian Murphet (Edinburgh, 2016), Gage McWeeny, *The Comfort of Strangers: Social Life and Literary Form* (Oxford 2018), and Jesse Rosenthal, "The Large Novel and the Law of Large Numbers; or, Why George Eliot Hates Gambling," *English Literary History* 77, no. 3 (Fall 2010): 777-811—although, for the purposes of this chapter, Richard Menke's stellar article pairing *The Lifted Veil* and *Daniel Deronda* is the most notable in the way it seeks to assimilate those texts to the characterological values Eliot expresses in the essay. See Menke, "Fiction as Vivisection: G.H. Lewes and George Eliot," *English Literary History* 67, no. 2 (Summer 2000): 617-653.

alongside the evolving physiological sciences, in ways that should make us re-think the critical role of "The Natural History of German Life." The idea animating that essay that the body serves as the place where repeated acts of thought are made durable as habit was a fairly old idea in 1856, essentially unchanged since 1739 when articulated by David Hume.[5] As clinical physiology took off in Victorian England during the later years of the 1850s, the primary valence of the body was shifted to the capability of the nervous system to interpret and react to sensations independent of the mind.[6]

Rather than taking the distaste Eliot expresses for sociology as her final word on the matter, I want to suggest that what Eliot is in essence doing is decoupling realism from either social or psychological mimesis and relocating it in the novelist's ability to capture the relationship between an organism and its milieu. The formation of habits that reflect a recognizable mode of life—what Eliot points to as the ideal form of character development—would make sense in the context of a mode of life that involves a stable relationship to a particular region: provincial life, as she argues in her essay, follows one set of temporalities, where customs form and change at the speed of biological adaptation, while urban encounter becomes the scene of heterogeneity and far rapider intervals of socially-produced temporalities. To transplant a character that formed in a provincial setting to an urban scene would, in Eliot's view, be to throw organisms of different kinds into "a new element before an apparatus for breathing in it is developed… The internal conditions [within the human subject] and the external are related to each other as the organism and its medium" ("Natural History" 157, 164). According to the philosopher of science Georges Canguilhem, however, the relationship between organism and milieu was a concept undergoing an important transformation right around the

[5] See David Hume, *A Treatise of Human Nature*, ed. Peter Nidditch (Oxford: Clarendon, 2009),
[6] Daston, "Responses," 194.

time Eliot turned from "The Natural History of German Life" to start writing fiction. By the mid-nineteenth century, the central problem facing biologists was how a single environment, the same set of physical conditions, could act on different organisms in different ways: "Out of the exuberance of the physical milieu, as a producer of stimuli whose number is theoretically unlimited, the animal retains only a few signals."[7] This is Eliot's bone of contention with sociology, which, by imposing abstract uniformity onto large numbers of people, fails to account for the way the same set of conditions would register unevenly across Britain's social and geographic terrain. As Canguilhem explains, however, the relationship between organism and milieu continued to evolve over the second half of the century: "What distinguishes the animal is the fact that he is a *center* relative to surrounding forces that are no longer, relative to it, anything but signals or stimuli; a center, in other words an internally regulated system in which reactions are controlled by an internal cause: immediate necessity."[8] Organisms no longer passively receive a common set of sensations in differential ways based on a static internal structure—the organism takes on an active role in interpreting and reacting to signals from its surroundings, a relationship that is always being reshaped in an ongoing present on the basis of "immediate necessity."[9] "To act on a living thing, it is not enough that physical stimuli be produced; they must also be noticed. As a result, to the extent that a stimulus acts on the living, it presupposes an orientation of its interest. The stimulus does not proceed from the object, but from this interest."[10]

What determines the way "interest" is distributed within a set of stimuli? As it happens, one of the most widely read physiologists working on the problem of how and why the nervous

[7] Georges Canguilhem, "The Living and Its Milieu," *Grey Room* 3 (Spring 2001), 20.
[8] Édouard Claparède, quoted in Canguilhem, "Living," 26.
[9] Canguilhem, "Living," 26.
[10] Canguilhem, "Living," 19.

system distributed its attention within a sensory field was George Eliot's life partner, G.H. Lewes. Lewes began work on *The Physiology of Common Life* (1859-60), in which he addresses that question, in the years immediately following the publication of "The Natural History of German Life." The way a physiological subject isolates, interprets, and reacts to particular sensations out of what Canguilhem calls "an exuberance" of sensations is, in Lewes's account, the mode of cognition that takes place directly in the nerves prior to the onset of consciousness.

In what follows, I explore the relationship between Eliot's strange 1860 novella *The Lifted Veil* and Lewes's physiological theory, arguing that *Daniel Deronda* (1876) when paired with *The Lifted Veil* renders the statistical public livable in ways "The Natural History of German Life" could not anticipate. *Daniel Deronda*, her final novel, tells the parallel stories of Daniel, who never knew his parents until he meets a young Jewish girl and discovers his Jewish heritage, ultimately leading him to join the Zionist movement; alongside the story of Gwendolen Harleth, who first refuses an attractive offer of marriage only to accept it later after her family's sudden financial ruin, after which she suffers under her new husband's tyranny. The climactic scene in which Gwendolen confesses to Daniel, soon after her husband has drowned, that she hesitated involuntarily before throwing him a line makes physiology's division between action and conscious intent key to the way bodies inhabit a world that moves too fast for conscious deliberation to keep up—and testifies to the way the body's preconscious impulses can solve problems in ways unavailable to moral consciousness. *The Lifted Veil*, a Gothic outlier from Eliot's more canonical fiction, concerns a young man who develops seemingly supernatural powers of foresight and mind-reading.

I begin by reading *Daniel Deronda* through the lens of "The Natural History of German Life" to refine our sense of where Eliot's ongoing concerns with statistical sociology lay. By

abstracting action from the site of its embodied production, it is as though statistics in *Daniel Deronda* mandate the social behavior they enumerate, imposing actions onto bodies from without. As I argue, this sense of statistics' predictive power comes from the way characters continually reconstitute themselves through the visual transactions of the sociological public. This leaves Eliot's characters under threat of being nothing but what sociology makes them, merely compilations of social data. Within a statistically rendered social sphere, individuals encounter one another anonymously, as sociological types within a crowd. The novel's turn to Judaism, in this light, acts as an uneasy narrative resolution to the problem of sociology: an inalienable form of identity that gives characters a sense of embedded belonging; but it is a solution available only to the few, and an escape from sociology that means leaving the British social altogether.

I turn then to *The Lifted Veil*, placing it in relation to Lewes's research on the nervous system. I argue that the novella is dramatizing two categories of physiological cognition, consciousness and preconscious impulse, in relation to one another. Eliot's thinking on this topic actually appears to outpace Lewes, who operates under an assumption common to Victorian physiology that the nervous system was fully individuated, every bit as bounded and detachable from context as the isolated specimens Lewes studied. By contrast, Eliot imagines a certain kind of collectivity forming through the uniformity of preconscious cognition. It is as though she imagines that the network of nerves running throughout the body might extend across large numbers of bodies, plugging directly into the nerves of others. This idea of a collectivized nervous system would become an influential strategy of crowd control ("the social organism"), advanced by Herbert Spencer and Walter Bagehot in the years between *The Lifted Veil* and *Daniel Deronda*.

Bearing in mind the category of preconscious cognition and its potential to collectivize, I conclude by turning back to *Daniel Deronda* to see what relations form in the scene of sociology—whether the nervous system can forge connections between anonymous bodies within the space of the crowd where traditional forms of interpersonal connection are not available. The way characters' attention is distributed throughout a crowded sensory field and occasionally arrested by some object in particular transforms the impersonal scene of sociological encounter into meaningful relationships. The way attention distributes itself and gets arrested occurs with the randomness Eliot associates with the spinning roulette-wheel at the center of her crowd scenes, and with the Gothic inexplicability of *The Lifted Veil*.

Throughout *Daniel Deronda*, we encounter two figures for thinking about social statistics: the gambling table, which assembles people who would otherwise not meet and makes them all subject to the same laws of probability, and suicide, which contemporaneous statisticians cited as among the most compelling instances of the way even intensely personal choices conformed to large-scale patterns in the aggregate. Through these figures, Eliot makes visible the way statistical collectivity takes hold of bodies and seems to assert its predictive power over individual action—that theoretical point at which fleshly bodies evaporate into numerical data, and, vice-versa, at which abstract rates of action get embodied within particular lives. This chapter, in short, addresses what happens to the body in the grip of social statistics: the nervous distractibility of a sensorium attempting to keep track of the way an anonymous public is classifying it within sociological categories, and how its preconscious modes of thought ultimately allow individuals to navigate that point at which bodies and numbers meet.

Natural History Meets a Statistical Present

"The Natural History of German Life" is particularly notable as one of the few places where the divergence of sociology from physiology becomes apparent within a single document: fiction from the 1850s onwards tended instead to pick a side, formally differentiating the perspectives lodged in each epistemic approach. Charles Dickens' *Bleak House* (1853) is famous for mapping first-person experience and a totalized view of the social whole onto two different narrators, which is a move formally mimicked by the trend of many novelists such as Wilkie Collins, Richard Marsh, or Bram Stoker in the second half of the century who present their stories as manuscripts by several authors edited after the fact to turn the confusion of embodied experience into narratives whose trajectory remains invisible from the perspective of individual narrators.[11] The boom of late-Victorian detective fiction is especially symptomatic in the way it blinkers its perspective: sleuths that operate by shutting out the wider scope of an abstract social sphere where individual deeds get lost and vanish, zeroing in instead on reconstructing the interaction between a guilty body and an environment that holds the record of its actions. By labelling each blinkered story a "case," the detective genre creates the illusion that embodied particularity and abstract generalizations are continuous with one another.

"The Natural History of German Life" claims for fiction the power to depict the social conditions of a given group of people as the horizon for interiority within that group. Good fiction, Eliot writes, brings about "the extension of our sympathies" to reach people for whom interiority is structured differently ("Natural History" 144). "Abstract or collective terms" such as "'the people,' 'the masses,' 'the proletariat,' [and] 'the peasantry'" tend to summon up such idealized caricatures in the minds of a middle-class readership that they indicate "a total absence

[11] Anna Gibson observes that "Dickens uses Esther's narrative to draw attention to both the difficulty and the necessity of detaching oneself from sensory immersion in the world in order to tell one's own story," which requires placing oneself with a larger scope of other lives. See Gibson, "Charlotte Brontë's First Person," *Narrative* 25, no. 2 (May 2017), 1.

of acquaintance and sympathy" with "the complex facts summed up in the collective term," such as "the degree in which they are influenced by local conditions, their maxims and habits" (141-2; 147). An exemplary novelist, Eliot maintains, is one who can transform fine-grained studies of external conditions into psychological conditions, narrating how they determine "the motives and influences" that act on the people who belong to such conditions (145). By showing how external conditions translate to internal conditions, character development in fiction allows readers to understand how even shared sensations and mass events induce different responses from different kinds of people. By telling the "natural history of social bodies" fiction can explain to a readership how historically longstanding social and environmental conditions assign particular kinds of experiences to different social groups, which shape the way people within those groups produce thoughts and feelings. The sweep of legislative reform across the nation, Eliot cautions, will progress in an uneven development across different sub-groups, which legislators will be unprepared for unless novelists educate the public with "a real knowledge of the people, with a thorough study of their habits, their ideas, their motives" (146).

Statistical sociology, by contrast, rose to prominence due to its ability to transform the behavior of heterogeneous sub-groups into nationwide averages. It is the task of good fiction, in Eliot's view, to work against the universalizing assumptions of "the splendid conquests of modern generalization…[the assumption] that all social questions are merged in economical science, and that the relations of men to their neighbors may be settled by algebraic equations" (146). The statistical sciences Eliot contemptuously refers to here aggregated actions and events into numerical tables and then drew conclusions about a population's morality, education, and health on the basis of abstract rates of actions evacuated of the particularities surrounding their occurrence. Fiction and statistics found themselves working on roughly the same task,

representing the social body, but statistical representations of people papered over the distinctions fiction drew out.

Eliot's aspirations for fiction swam upstream against the rise of these statistical sciences in Britain in the 1850s. As Ian Hacking explains, "an avalanche of printed numbers at the start of the nineteenth century" revealed "statistical laws that look[ed] like brute, irreducible facts…after social phenomena had been enumerated, tabulated, and made public."[12] The extraction of statistical laws from social data—and the widespread acceptance of those laws as fact—began in France, principally in the 1830s. Before French statisticians started to collect statistics related to a wider range of social matters—crime, education level, suicide, employment, and even the verdicts returned by law courts—"statistics" referred simply to the measurement of the *state*, inert estimations of its population and territory. By the 1830s, it referred instead to a methodology of social and moral diagnosis, which redefined key events within the lives of individuals as symptoms of larger patterns of occurrence. By observing what appeared to be inexplicably regular patterns in aggregated social, economic, and moral behavior, statisticians detached actions from the particularities and circumstances that, common sense would tell us, caused them. "The law of large numbers," a term that originated in 1835, introduced the notion that human behavior follows the choreography of rules unfelt and invisible from the perspective of individual agents: "if one observes a very considerable number of events of the same kind, depending on causes that vary irregularly, that is to say, without any systematic variation in one direction, then one finds that the ratios between the numbers of events are very nearly constant."[13]

[12] Hacking, *Taming*, 3.
[13] Siméon Denis Poisson, quoted in Hacking, *Taming*, 95.

Regardless, in other words, of an individual's personal control over whether or not to commit a crime, a certain number of crimes per year appeared to be mandated by the laws of statistical regularity, which eventually came to be "treated like causes in their own right, with no need of subservience to minute necessitating causes."[14] In claiming that statistical rates had the power to predict the future behavior of a population, sociologists in effect wrested action away from the "motives and influences" Eliot locates in the history of a body's sensations. They instead attributed action to regular patterns in the rates of popular behavior that statistics made visible for the first time. In Britain, the compilation of social statistics was chiefly the province of bureaucrats rather than scientists until the late 1840s—more a record of population density and approximate vital force of the working classes than a way of reconceptualizing social behavior. The 1840s saw statistics taken up more widely in reformist circles, first to estimate the frequency of (im)moral acts, and eventually to reconceptualize such acts as the necessary consequence of environmental and economic conditions that statistics measured and brought to bear on social problems. This introduced a new era of population management and cultural commentary that took statistical data as a representation of objective fact, one that spoke with greater authority about the systemic cause of social behavior than subjective accounts of an individual's personal motivations.[15] In broad outlines, the novels of Charles Dickens conform to the logic of the law of large numbers, as his characters are invariably connected and choreographed by intricate plots that are completely opaque from the perspective of first-person experience and only gradually become knowable to readers through the bird's eye vantage of a narrator.

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[14] Hacking, *Taming*, 147.
[15] See Lorraine Daston and Peter Galison, "Seeing is Believing: Truth, Objectivity, and Judgment" in *Objectivity* (Cambridge: MIT, 2007), 363-381.

Statistics enumerated the behavior of a population so that the statistician's perspective expanded fractally past the constraints of first-person experience; but as Alain Desrosières makes clear, sociology did not merely use statistics to compile a larger data set describing the object world. Desrosières illustrates how French statisticians, notably Adolphe Quetelet, collected measurements of physical objects and real events, first averaging that data, and then averaging and graphing those averages to create an additional layer of data that represented nothing that actually existed in the object world: "Quetelet distinguished *three* kinds of mean values...the *objective mean* corresponded to a real object, subjected to a certain number of measurements. The *subjective mean* resulted from the calculation of a central tendency…[and] an *arithmetical mean* [which] was pure fiction."[16] By observing the tendencies of different averages and their relationships to one another, statisticians cast those trends as the "ideals" that real phenomena imperfectly approximated.

As diverse measurements were consolidated into unified averages, regional economic and social conditions were synthesized into nationwide indexes of prices, unemployment, and homelessness; characteristics of individuals such as age, education, income, appearance, and vocation were abstracted and combined into figures like Quetelet's "average man," which became central to discussions of national character. Above all, the law of large numbers transformed individual actions into data points dictated by the curve of an invisible graph. The supposed freedom of will and conscious self-determination came to seem like bland holdovers from Enlightenment philosophy, obsolete terminology next to sociologists' conviction that actions were statistically mandated at certain rates of frequency. It was merely a question of probability which individuals would commit them.

[16] Desrosières, *Politics*, 76.

Eliot is quick to criticize Dickens in "The Natural History of German Life" for depicting characters operating under the compulsions of social systemics rather than their own psychologies. By 1876 when she published *Daniel Deronda*, however, faithful representation of social life appears to have become impossible without factoring those forces in, as she opens that novel with a scene that renders visible the laws of probability. The collectivity Eliot assembles around a German roulette-wheel in the first pages of the novel is not presented as the Dickensian achievement of plot, but rather as a random assemblage of human life all subject to the same laws of chance.

> Around this table fifty or sixty persons were assembled, many in the outer rows, where there was occasionally a deposit of new comers, being mere spectators, only that one of them, usually a woman, might now and then be observed putting down a five-franc piece with a simpering air, just to see what the passion of gambling really was. Those who were taking their pleasure at a higher strength, and were absorbed in play, showed very distant varieties of European type: Livonian and Spanish, Graeco-Italian and miscellaneous German, English aristocratic and English plebian. Here certainly was a striking admission of human equality. The white bejeweled fingers of an English countess were very near touching a bony, yellow, crab-like hand stretching a bared wrist to clutch a heap of coin—a hand easy to sort with the square, gaunt face, deep-set eyes, grizzled eye-brows, and ill-combed scanty hair.[17]

Eliot goes on to describe further the diverse social positions and corresponding physical features making up the crowd, assembling under the equalizing laws of chance a combination of people who would not otherwise meet: "a respectable London tradesman, blond and soft-handed," "a

[17] George Eliot, *Daniel Deronda*, ed. Graham Handley (Oxford, 2009), 4. Further references are cited parenthetically.

handsome Italian, calm, statuesque," "an old bewigged woman with eyeglasses pinching her nose," and "a man with the air of an emaciated beau or worn-out libertine, who looked at life through one eyeglass, and held out his hand tremulously…some dream of white crows, or the induction that the eighth of the month was lucky, which inspired the fierce yet tottering impulsiveness of his play" (4-5). Physiognomy, fashion, and embodied habit emphasize the kind of differences Eliot laid out in her 1856 essay. Types of people whose lives have been composed of markedly dissimilar sensations arrive at the roulette-table under unique "motives and influences," ranging from a simpering curiosity to superstition to compulsive enthusiasm.

The individuated and personal reasons for placing bets, however, are flattened out into movements and expressions so uniform that they appear to be a single *act of betting* abstracted from any particular body and applied equally to all. "While every single player differed markedly from every other, there was a certain uniform negativeness of expression which had the effect of a mask—as if they had all eaten of some root that for the time compelled the brains of each to the same narrow monotony of action" (5). The fixed number of possible outcomes at roulette, like the statistical mandate that certain actions will occur at particular rates, makes the fate of an individual a matter of probability. The gambling table condenses a population into a single room, where so many wins and losses add up to a more or less invariable overall pattern. The statistical mandate detaches actions from personal motivations, and instead flattens them out into a sequence of mindless routines that imposes uniformity onto the otherwise heterogeneous collective.

"The Natural History of German Life" views the abstractions supplied by "economical science" as merely an inadequate way of representing human experience. As early as 1860, however, Eliot began to diagnose a curious draining of cognitive and affective energy from

individuals whose lives had become subject to the dictates of chance at the level of large numbers. The "dull, gas-poisoned absorption" individuals exhibit in *Daniel Deronda* when they no longer act on their own "motives and influences" continues a through-line in Eliot's fiction that began in *The Mill on the Floss* (1860), where provincial life gets subsumed into the abstract workings of a larger economy. Physical property gets converted into abstract quantities like "debt" and "equity," which, when traded, can change property ownership and financial fortunes without warning and seemingly without logical cause. As Mary Poovey points out, "while individuals did not begin to invest in shares in large numbers until at least the 1870s, the institutions to which individuals entrusted their money did," thus subjecting individuals to the risks of market vicissitudes before comprehension of such matters was widespread (Poovey 18). In *The Mill on the Floss*, the shock of losing his property due to the operation of laws he cannot comprehend throws Mr. Tulliver, father of the protagonist, into a coma-like stupor.[18] As though through performative utterance, Tulliver no sooner reads a letter informing him that a lawsuit allowed his real estate to be converted into debt, than he loses his senses along with his property. Tulliver is a character constituted by his property, even to the extent that his thoughts and words take the form of a stock of aphorisms that furnish his mind like objects—almost literalizing John Locke's 1689 model of personhood as "property in the self," a self-enclosure of ideas and experiences.[19] While Tulliver presents a particularly stolid and inflexible version of self-enclosed personhood, he is but an extreme version of the kind of character Eliot champions in "The Natural History of German Life": a set of locally-flavored experiences enclosed within a

[18] For a discussion of The Mill on the Floss in the context of burgeoning public awareness of economic abstractions, see Mary Poovey, "Writing about Finance in Victorian England: Disclosure and Secrecy in the Culture of Investment," *Victorian Studies* 45, no. 1 (Autumn 2002): 17-41.
[19] For John Locke's discussion of inalienable personhood, see Locke, *Two Treatises of Government*, ed. Peter Laslett (Cambridge, 1988), 383.

character's past. His character is based in the local and the tangible, a kind of character that formed in the context of an older economy based on real estate. This proves inviable as a mode of inhabiting an economy composed of disembodied abstractions. When Eliot pries open the bounded locale of provincial life in *The Mill on the Floss* and subjects it to "economical science," both property belonging to an individual and the properties of individuality become suddenly precarious. It leaves him, as Eliot describes the German peasantry when similarly subjected to sudden economic changes, "in a new element before an apparatus for breathing in it is developed" ("Natural History" 157).

Daniel Deronda seeks to narrate that precarity of selfhood—to see what happens to characters whose lives are subject to the determinations of "economical science" and "algebraic equations." In the later novel, the sudden financial ruin of Gwendolen's family is framed as an extension of the laws of the gambling table:

> Gwendolen, we have seen, passed her time abroad in the new excitement of gambling, and in imagining herself an empress of luck…We have seen, too, that certain persons, mysteriously symbolized as Grapnell and Co. [the bank whose failure ruins her family], having also thought of reigning in the realm of luck, and being also bent on amusing themselves, no matter how, had brought about a painful change in her family circumstances. (132)

Social abstractions like the financial world are scarcely more comprehensible to Gwendolen and her family than to Tulliver. The statistical certainty that so many families will be rendered destitute in a year and the precise probability of that happening to any one family would do little to prepare the members of a household for that event. The figure of gambling, when Gwendolen lights upon it as a way of explaining her predicament to herself, does not go very far in

illuminating the science of large numbers or the workings of the market, and, indeed, mystifies the business strategies of banks like Grapnell and Co. as pure chance, a hard limit to what individuals can understand as meaningful. What we are left with is that an individual's social position and the identity he or she acquires, like Tulliver, by virtue of that position, have become suddenly precarious.

Living Bodies in an Immaterial World

If the British novel of the 1870s can be said to have a thematic signature, it is surely that precarity: characters who find themselves cast without warning from one sociological category to another, not as a narrative resolution or on any basis of merit, but as an almost incidental feature of what it means to have a social identity. *Daniel Deronda* is especially notable in this respect, as it captures that logic in the roulette-table, which then becomes the shared basis for the novel's two parallel storylines: Gwendolen's financial ruin and attempt to win back a social position through marriage (another gamble that goes awry), and the mystery of Daniel's parentage that leaves him perched on the brink of any number of possible sociological categories. Daniel's predicament goes to show that you need not have rolled the dice yourself to still find yourself dependent on the way the dice land.

Jesse Rosenthal interprets gambling in *Daniel Deronda* as a representation of "rigid laws that operate at the large scale coexisting with unconditioned autonomy at the individual scale…[offering] a unity which is not apparent, or even particularly meaningful, as a way of describing the novel's individual subplots and characters."[20] Alongside "The Natural History of German Life," however, it becomes apparent that statistics act less as "rigid laws" and more as a mode of assembly in which characters understand themselves and others in terms of sociological

[20] Rosenthal, "Gambling," 778.

type. Statistics usurp action from individual "motives and influences," in other words, not because Eliot decrees it to be so in the metaphysical laws of her novel, but rather through a series of visual transactions by which her characters survey their surroundings as so much demographic information and position themselves within that data set through varying degrees of conformity. The result is that the particular features of individuals are eroded by actions so anemically uniform that they may as well have originated in abstractions like "the average man," which exercise a tyranny over individuals' self-consciousness. By putting social statistics into gambling, Eliot makes a sociologically rendered social body take hold of individual bodies as "if they had all eaten of some root," subjecting the entire scene to a "dull, gas-poisoned absorption" (*Deronda* 5).

When Gwendolen receives word of her family's misfortune, we are witness through Gwendolen's own eyes to a sudden rupturing of her "self"—a discontinuity of character almost as dramatic as Tulliver's. Whereas Tulliver is a fish out of water, a form of character who cannot survive long in a changing social habitat, Gwendolen actually exchanges one self for another, reconstituting herself around her new sociological category. It is not simply that her financial straits force her into actions that she previously had the luxury of ethically avoiding, like her marriage to Grandcourt. On first hearing the news of the bank's failure, Gwendolen's shock makes her act automatically on habit, a line of continuity with her past that seems as inalienable from her character as the body those habits are lodged in: "She stood motionless for a few minutes, then tossed off her hat and automatically looked in the glass" (11). Her habituated movements steer her towards a mirror, where she scrutinizes the image of her body for how it will read in her suddenly changed circumstances: "she took no conscious note of her reflected beauty, and simply stared right before her as if she had been jarred by a hateful sound and was

waiting for any sign of its cause." This scene dramatizes a split between Gwendolen's physical person, the continuity of its habits and the history of its sensations, and the meanings that get assigned to its image, as though to limn the point at which the human subject as a self-contained, physical body meets the subject as a unit of social data, subject to sociological determinations.

Whereas *The Mill on the Floss* showed how even tangible real estate can evaporate into the abstraction *debt*, in *Daniel Deronda* Eliot turns her attention to the physical body with the same idea in mind. *Daniel Deronda* homes in on the body as the site of a struggle between, on the one hand, actions and affect arising from immediate sensory experience, as opposed to the external determinations of the law of large numbers, on the other hand. When Daniel realizes that the secret of his parentage makes it essentially a matter of chance what class he belongs to, he begins to suspect "that there was something about his birth which threw him out from the class of gentlemen" (144). He experiences much the same precarity of social footing that befalls Gwendolen. Whereas she contemplated how her outward appearance would serve her in a new social category—the way she is constituted even in her own eyes by external classification—Daniel discovers that his very affect arises from the situation of feeling like a statistic: in considering how slippery his social footing is, "he was feeling the injury done him as a maimed boy feels the crushed limb which for others is merely reckoned in an average of accidents" (144). The narrator, penetrating into Daniel's thoughts to render them as speech, finds that belonging to a statistical public has restructured Daniel's interiority. Sensory pain arising directly from the body is here mediated through a group of imagined "others" whose statistical alienation from and indifference towards that pain appear to inflect the way the pain is experienced. As someone with no blood ties to fix him to a particular social position, Daniel has a sudden glimpse of himself as nothing but a statistical unit, a free-floating social datum that is just as subject to being subsumed

into a disembodied "average of accidents" as it is subject to the sociological probability of belonging to the masses outside "the class of gentlemen." It is, strikingly, not Daniel himself who the narrator asks us to imagine with a broken bone. Even the immediacy of bodily sensation is displaced onto another, from which position it returns to Daniel irretrievably mediated through a statistical calculation.[21]

When character is so thoroughly flushed out of any enclosed structure of self and displaced onto a collectivized field of social data that individuals internalize, the result is an individual constituted and continually reconstituted through the transactions of public encounter. "It was," the narrator remarks, "already a cutting thought that such knowledge [of Daniel's uncertain parentage] might be in other minds. Was it in Mr Fraser's?...Did Turvey the valet know?—and old Mrs French the housekeeper?—and Banks the bailiff?" (144). Having discovered the statistical average structuring Daniel's interiority, the narrator's free indirect discourse continues to unpack that statistical abstraction into the particular voices that merge in Daniel's mind, blend, and re-emerge as the impersonal voice of sociological categorization.[22]

We find the same mechanism at work in Gwendolen, who continually surveys her surroundings as though to read from a generalized gaze what categories she is being assigned to. When seated at the roulette-table, "she looked round her with a survey," reading the faces turned towards her for how they are "measuring her" and whether they are "looking down on her as an inferior" as she instinctively fears, or forming "a *cortège* who would worship her as a goddess of luck and watch her play as a directing augury" as she secretly hopes (5-6). On meeting Daniel's

[21] As Elaine Hadley suggests, under Victorian statistics "counting people seemed to disembody persons." See Hadley, "Nobody, Somebody, and Everybody," *Victorian Studies* 59.1 (Autumn 2016), 67.
[22] Audrey Jaffe argues that social statistics imagined individuals "as having internalized a composite image of the social whole." See Jaffe, *The Affective Life of the Average Man: The Victorian Novel and the Stock Market Graph* (Columbus: Ohio State, 2010), 13.

gaze, she interprets his attitude to mean that "he felt himself in a region outside and above her, and was examining her as a specimen of a lower order," presumably lumping her in with "the human dross around her" (6).

Face-to-face contact even with particular individuals picked out of a crowd turns into a circuit through which Gwendolen's perspective on herself is mediated through a generalized social gaze that tells her how others are categorizing her and locating within the ranks of a collective. Her categorization within a range of social classes and character-types that sociology explicated forms the horizon for her aspirations of self-advancement. Her body, no longer a source of inalienable continuity over time, becomes subject to this same logic of categorization. Although plagued by the sense of being visually assigned to a socially degraded position, Gwendolen reflects that at least her appearance is such that eyes turn towards her with interest, rather than being "disregarded…as one of an insect swarm who had no individual physiognomy" (7). Her appearance becomes a surface of signification whose signs acquire meaning strictly through the visual transactions of a generalized public, with no intrinsic value to Gwendolen independent of those transactions. As a result, "Gwendolen Harleth, with all her beauty and conscious force, felt the close threat of humiliation…no more cared for and protected than a myriad of other girls," all of whom are equally subject to "the chances of roulette [which] had not adjusted themselves to her claims" (201). The laws of chance make themselves felt in Gwendolen's storyline, like Daniel's, as the threat of being displaced from a secure social position and plunged instead into "a hurrying roaring crowd in which she had got astray" (201).

The idea that collective belonging might in some way prove detrimental to an individual's capacity to be anything *but* a piece of the collectives to which he or she belonged was a matter of growing concern for political theorists and cultural commentators following the

rise of sociology in the 1850s. In 1859, John Stuart Mill testified to the enormity of this threat by conflating "society" with "crowd"—a term previously used to designate those sub-populations not included in society: "Society has now fairly got the better of individuality… at present individuals are lost in the crowd…the mind itself is bowed to the yoke…Conformity is the first thing thought of…until by dint of not following their own nature they have no nature to follow."[23] Mill sees individuals being unmade through the transactions of social belonging, reconstituted as nothing but conformity to collective trends. As "society" became subject to rigid laws, uniform behavior began to exercise a coercive force over the faculty of judgment. Through a kind of surveying procedure strikingly similar to Mill's account of conformity, Gwendolen and Daniel continually reconstitute themselves in line with social uniformity. The "dull, gas-poisoned absorption" of the roulette-table appeared to infiltrate minds almost by magic, but in Gwendolen and Daniel's day-to-day lives we can see how the sociological precarity Eliot captures in the gambling table causes her characters to empty themselves of any kernel of selfhood that does not originate in the collective.

In "The Natural History of German Life," Eliot views the material body as a source of sensations and habits that roots character in the kind of local conditions and immediate experiences that fiction ought to recuperate from beneath the bland universalisms of sociology. In *Daniel Deronda*, however, Eliot appears to have adjusted her thinking to focus instead on how a sociological public forms a habitat in which the body cannot perform that function. As Daniel's imaginary boy with a crushed limb indicated, he experiences his body's sensory-affective capacities only through the mediation of a statistical public and his position within it. It is chiefly through Gwendolen's plotline, however, that Eliot explains how this transformation takes place.

[23] John Stuart Mill, *On Liberty and Other Writings*, Ed. Stefan Collini (Cambridge, 1989), 57.

Gwendolen's body, as a physiological apparatus, becomes nervous and distractible as it attempts to inhabit the system of sociological classification, atmospherically dispersed in an effort to keep track of how the many eyes on her are seeing her. The unflattering results of her visual survey "did not bring the blood to her cheeks, but sent it away from her lips," as though Eliot is keen to distinguish Gwendolen's sociological self-consciousness from merely a blushing embarrassment at social exposure (*Deronda* 6). Her attention is continually dispersed into an almost reflexive consciousness of how she appears to those around her and how she ranks within any collective she is a part of. She perceives the way others view her, we are told, "as birds know climate and weather," such that a sensory attunement to her social surroundings penetrates her awareness perhaps without her consent and acts on her as a set of rules and directives shaping her behavior (82). The centrifugal dissipation of her consciousness into her social surroundings registers on her body as "little shock[s] which flushed her cheeks and vexatiously deepened with her consciousness of it" (91). Her physiology is thus forced into a kind of feedback loop, as her body reacts not directly to the object world, but rather to the way it is perceived within a system of social classification. The sphere of social visibility peels itself off from the material world of physical forces. By contrast to an object world navigable through empirical perception, Gwendolen views those around her as compilations of demographic information and the source of information about herself, based on how they categorize her. Within this imaginary space, her body appears not to carry out the task of perception so much as it is made to bear sociologically formulated labels, to which it reacts nervously.

The body migrates from an apparatus highly evolved to thrive in its habitat to become frayed at the nerves and hyper-susceptible to its own flaws within the artificial habitat of a social sphere. Gwendolen's education in the physical and natural sciences "set her imagination at work

in a way that made her tremble" (52). Thinking about the world as a physical space "impressed her with an undefined feeling of immeasurable existence aloof from her, in the midst of which she was helplessly incapable of asserting herself…but always when some one joined her she recovered her indifference to the vastness in which she seemed an exile." Without eyes on her to affirm the reality of the sociological system she belongs to, Gwendolen finds herself thrown back into the material world—in her imagination, a material world governed purely by the laws of physics where she is stripped of the value her body acquired by virtue of its appearance and commands instead only a limited physical power. By interpreting herself through the eyes of others, Gwendolen develops a sense of self that is shown here to be incompatible with the way in which an organism inhabits its material surroundings.

The body's physiology and the social connotations of its physiognomy continue to disrupt one another throughout the novel, most notably when Gwendolen is giving a recital on a small stage in their home, prior to her family's financial trouble. In the midst of her performance, the panel covering a particular picture randomly creaks open, causing Gwendolen to shriek and collapse in a nervous fit. The picture, which had previously disconcerted Gwendolen on first seeing it, depicts "an upturned dead face, from which an obscure figure seemed to be fleeing with outstretched arms" (20). Many critics have interpreted this moment as a sign that Gwendolen's self-centricity is built on the suppression of her mortality, but none has been able to explain why it should spontaneously intrude onto a scene of theatre. Having placed herself on a stage where she is the central object of a collective, evaluative gaze—in essence, the way she imagines herself at all times—Gwendolen is confronted not only with the decline and eventual death of the body that is her primary social commodity, but also with the vague depiction of something that arises from the body that is more than its appearance. Whether the soul or, more

broadly, the bodily production of sensations, affect, and ideas that physiologists began to view as the material basis for the soul, the body here asserts its capacity to be something more than what the stage makes of it.

David Kurnick has argued that Eliot continually frames Gwendolen with stages and theatrical space in order to tear her away from the particularizing effects of novelistic narration and immerse her instead in theatre's presentation of characters as fully public and exteriorized.[24] While Kurnick argues that the collectivity implied by theatrical form destabilized fiction's emphasis on isolated psychology, he does not specify the relationship between theatrical publics and contemporaneous forms of collectivity such as the statistical, nor the way in which theatre changed how fiction called upon the body that *produced* psychology. In Gwendolen, those relationships are crucial. Speaking in private to her mother, Gwendolen says, "I wish you had given me your perfectly straight nose; it would have done for any sort of character—a nose of all work. Mine is only a happy nose; it would not do so well for tragedy" (21). As Michael Meeuwis argues, "the space of amateur performance as a laboratory for modeling emulable behavior was particularly significant for female actors" such as Gwendolen.[25] Theatre constituted "a dominant medium in late-Victorian life" not only for producing synthetic social traits that educated audiences as to polite behavior, but also for disseminating those traits among the actors and audiences through almost unconscious emulation.[26] If Adam Smith made it a familiar proposition that the imagined eyes of others could and should be internalized within an individual's sense of self, Gwendolen is remarkable for eliding those "others" and dealing instead only with the categories generated in the context of public visibility. The difference between social contact

[24] David Kurnick, *Empty Houses: Theatrical Failure and the Novel* (Princeton, 2011), 91-104.
[25] Michael Meeuwis, "The Nervous Stage: Nineteenth-Century Neuroscience and the Birth of Modern Theater," *Nineteenth-Century Literature* 73, no. 1 (June 2018), 433.
[26] Meeuwis, "Nervous," 427.

with a small circle of particular individuals, as stated in Smith's theory of sympathy, and the abstract, intangible public produced by sociology is especially apparent here. Gwendolen makes the public palpable primarily as a set of categories used to sort people into types or genres. Much like the gambling table, the theatre stands in as a figure for an individual's place within a collective that assembles and choreographs bodies according to its own impersonal laws.

Eliot is quick to point out the way this role of the body produces character in an entirely different sense from the physiological production of subjectivity: her narrator reflects "that the set of the head does not really determine the hunger of the inner self for supremacy: it only makes a difference sometimes as to the way in which supremacy is held attainable, and a little also to the degree in which it can be attained; especially when the hungry one is a girl" (43). The narrator, in this wry aside, mimics the language of phrenology, or the branch of science that explained character through the outer shape of the head, to suggest that the scientific significance of "the set of the head" gets supplanted by an entirely different set of meanings that accrue to the body's visible features. A few pages later, the narrator affirms this principle: "Here, should any young lady incline to imitate Gwendolen, let her consider the set of her head and neck: if the angle there had been different, the chin protrusive and the cervical vertebrae a trifle more curved in their position, ten to one Gwendolen's words would have had a jar in them" (56).

By the time Eliot began work on *Daniel Deronda*, phrenology had all but vanished from scientific discourse, replaced by the clinical physiology Lewes was influential in promoting. Why resurrect a phrenological vocabulary only to re-enact its becoming obsolete, merely for the sake of a fairly arcane joke? Phrenology significantly differed from physiology by locating character in static features of the cranium, a fixed archetype of personhood enclosed in the body. Eliot's narrator nimbly locates Gwendolen's character in essentially the same features, but, by

defining those features purely as a means of social categorization through public visibility, pries open that self-enclosed notion of the body and subjects those static features to variability and discontinuity. By directing our attention to the supreme importance of the outward appearance of a character's body, something physiologists like Lewes did not attend to, Eliot suggests that appearance ultimately has ramifications on the physiological subject in determining the way the social world receives that character and affecting how signals are sent between organism and milieu.

By systematically unmooring character from the body as self-enclosure or a source of continuity over time, Eliot is very precise in reversing the terms of what she says constitutes good fiction in "The Natural History of German Life." In the essay, "habit" is especially important as the way in which someone's immediate surroundings and the kind of sensations and actions native to that environment become integral to one's development. The social precarity that dissevers individuals from any stable environment in *Daniel Deronda* makes any such relationship between organism and milieu conspicuously absent, particularly when the narrator points it out in the context of Gwendolen's displacement from home to home:

> A human life…should be well rooted in some spot of native land, where it may get the love…for the sounds and accents that haunt it…not by sentimental effort and reflection, but as a sweet habit of the blood. At five years old, mortals are not prepared to be…stimulated by abstract nouns… This blessed persistence in which affection can take root had been wanting in Gwendolen's life. (16)

Habit becomes an absent presence, a backdrop for the kind of growth and development that the novel's main characters can only struggle to achieve. Without the mold of habit to keep characters continuous with themselves, they develop instead a peculiar formlessness: without

"good and sufficient ducts of habit," the narrator explains, "our nature easily turns to mere ooze and mud, and at any pressure yields nothing but a spurt or a puddle" (132). Catherine Gallagher has influentially shown that Eliot writes character by molding precisely such material into durable forms: as Eliot writes in *Middlemarch,* "the most glutinously indefinite minds enclose some hard grains of habit; and a man has been seen lax about all his own interests except the retention of his snuffbox, concerning which he was watchful, suspicious."[27] Gallagher argues that Eliot's construction of character is modelled in miniature in this passage, "moving as it does from the specificity of the named character to the fluid and 'glutinously indefinite' quality of the abstract 'mind' of his class, then through the 'hard grains of habit' that signal the beginnings of another individual."[28] Associating that formlessness with what abstract groups of people have in common with one another, Gallagher views habit as the beginnings of a character's particularity and distinction from such groups. *Daniel Deronda*, by contrast, turns that process around. Chance deracinates individuals from the conditions Eliot lays out as the basis for habit-formation, such that neither Gwendolen nor Daniel feels any basis for self apart from their social positions.

The obvious exception to this trend is Mirah and, through her, Daniel's discovery of his Jewish parentage. Drawing on the "counter-public" status of Jews in Victorian Britain, Eliot figures Judaism as exempt from the sociologically rendered public.[29] In Mirah, we see habit working the way it is supposed to: stepping into a boat on her first meeting Daniel, "she drew

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[27] George Eliot, *Middlemarch*, ed. David Carroll (Oxford 1998), 8. Quoted in Catherine Gallagher, "George Eliot: Immanent Victorian," *Representations* 90, no. 1 (Spring 2005), 63.
[28] Gallagher, "Immanent," 63.
[29] On "counter-publics," see Michael Warner, *Publics and Counterpublics* (New York: Zone Books, 2005), 65-124. Deborah Nord discusses the status of Jews both in *Daniel Deronda* and contemporary British society. See Nord, *Gypsies and the British Imagination, 1807-1930* (New York: Columbia, 2008). Michael Ragussis discusses the legislative negotiations surrounding the incorporation of Jews into the social body, and how those negotiations made the theatrical portrayal of ethnicity a kind of limit case for liberal open-mindedness. See Ragussis, *Theatrical Nation: Jews and Other Outlandish Englishmen in Georgian Britain* (Philadelphia: Pennsylvania, 2010).

backward no more, but stepped in easily, as if she were used to such action" (*Deronda* 162). Her body renders her past visible, etched in even her minor actions. Through Mirah, Daniel discovers a continuity within himself that ties him to his family. The trace of his parentage, which he always looks for in vain in the mirror as ballast against his social precarity, finally emerges in Mirah: "His own face in the glass had during many years been associated for him with thoughts of some one whom he must be like—one about whose character and lot he continually wondered" (158). On seeing Mirah for the first time, she makes an "agitating impression on him" that "stirred a fibre that lay close to his deepest interest in the fates of women—'perhaps my mother was like this one.' The old thought had come now with a new impetus of mingled feeling" (162). *Daniel Deronda* thus searches out an alternate form of collective belonging, ethnicity, that is inalienable from the individual. In finding that he had always belonged to that community without knowing it and ultimately joining the Zionist movement, Daniel finds a form of collective belonging based on something in-born within himself. The so-called "Jewish question," however, provides only an uneasy narrative resolution to the fraught relationship between body and social body, as Daniel escapes the reach of statistical personhood only by escaping Britain altogether.

What We All Have in Common

As Eliot emphasizes from the first page of *The Lifted Veil*, the only resolution to a narrative—the only way stasis is possible within a narrative consciousness—is through the death of the body, a silencing of sensations. The opening to the novella, where Latimer foresees his own death and with it the final silencing of all his faculties, is in many ways a refusal of the "happily ever after" tropes in the context of a physiological subject for whom stasis is death. Neither the physiological body nor the sociological public was well-suited conceptually to the

structure of narrative resolution, suggesting that we may have to find an alternate way of reading Eliot's fiction to understand how she rendered a statistical public inhabitable to a physiological subject. Both body and social body comprised a heterogeneous group of elements always in flux. As an open-ended sequence of sensory interactions with its environment, the material body in the eyes of some theorists of government actually resembled the statistically rendered population, which was always generating new lives, new actions, new occasions to be measured. In the late 1850s, a small but prominent set of liberal reformers viewed this open-endedness as a potential affinity between body and social body, both of which responded more to continual management than to the dictates of a sovereign will, whether the mind or a ruler. Herbert Spencer and Walter Bagehot in particular worked to integrate the sciences of physiology and sociology, placing the nervous system at the center of new schemes of population management.

The physiological science they based their theories on was the brand of body science popularized largely by Lewes, and which Eliot took as a rough mold for sensation and experience as she describes them in "The Natural History of German Life." She did not engage physiology with any specificity, however, until she published *The Lifted Veil* in 1859. The period between the 1856 publication of her essay and 1859 was the same period in which Lewes, a longtime enthusiast of philosophical biology, wrote his first major contribution to the field, *The Physiology of Common Life* (1859-60).[30] There, Lewes sought to lay bare the way "common life," or day-to-day experience, was shaped and animated by a vast range of processes in the body that were not experienced consciously or attended to deliberately. The digestive, respiratory, and circulatory systems were his particular focus in the first volume, specifically the way they stabilize an individual's relationship to his or her environment. Together, they form an

[30] G.H. Lewes, *The Physiology of Common Life*, vol. I (Leipzig: Bernhard Tauchnitz, 1860). Further references are cited parenthetically.

economy with the outside and are always in the process of assimilating matter from the external world to the inner workings of the organism. Lewes emphasized that the chemical and muscular functioning of these systems are not merely the steady repetition of a few simple acts—the release of chemicals to synthesize protein, for instance, or the constriction of muscles to cause blood propulsion and inhalation. Rather, even without the intervention or awareness of the mind, the body is capable of modifying those actions in response to contingencies and altered conditions in its environment. The second volume, under composition in the same years but published in 1860, centered on an explanation of the nervous system that makes this possible. Following the insight of Sir Charles Bell that one type of nerve fiber has a motor function and another type a sensory function, Lewes demonstrates that a stimulus applied to a sensory nerve generates a muscular reaction by communicating directly with the motor nerve without the mediating step of being processed in a centralized brain.

Through experiments on etherized frogs whose brains he had carefully removed, Lewes argued that such non-cerebral activity indicated that complex organisms comprised multiple centers of cognition distributed throughout the body. These "ganglions," or nerve clusters, allowed sensory nerves to communicate directly to corresponding motor nerves, creating far faster reactions to environmental stimuli than, say, conscious deliberation. This theory rested on Lewes's innovative assertion that all nerve fibers were made of the same sort of "sensible" tissue, allowing ganglia to translate sensations in one nerve into motions in another, and vice-versa. Nerves link directly to nerves, making the ganglion the place where the bulk of "thinking" and acting occurs, well before sensations made their way to the brain and consciousness kicks in.

The Lifted Veil dramatizes these two categories of cognition in relation to one another: consciousness capable of abstract thought that transcends the embodied sensations of any one

moment, versus the thinking that takes place directly in the nerves in the moments before consciousness has time to exercise itself. Latimer, the asocial narrator-protagonist of this strange story, mysteriously develops a "superadded consciousness" that allows him to see glimpses of his future and to read the minds of those around him.[31] What is striking about his future-forecasting ability is that it tells him very little that could not be guessed or learned. His key insights are that his marriage to Bertha will prove unhappy—hardly surprising given his own cantankerous nature and his detailed account of how manipulative he finds her—in addition to a premonition of his own death (and his reflexive attempt in the moment to save himself), and a flash of what Prague will look like when he visits. It amounts, in other words, to the ability to abstract his thoughts from his body's embeddedness in an ongoing sequence of sensations and automated reactions. His foreknowledge comprises the faculties of consciousness that enable an individual to moderate the impulses of sexual attraction like Latimer feels for Bertha with circumspection, to conceptualize death as an idea rather than the body's basic survival instinct, and to expand cognitively beyond the constraints of his actual sensory experience either through aesthetic imagination or a cosmopolitan education. In every instance, his foresight is something that has not presented itself to his senses yet, but something available to the powers of consciousness. His prediction of his own death in the novella's opening lines makes this especially clear: he longs for death and "groan[s] under the wearisome burthen of this earthly existence," but he knows that when "the horrible contraction...begin[s] at my chest" and a "sense of suffocation…come[s]," he will involuntarily "make a great effort, and snatch at the bell..I long for life, and there is no help…Agony of pain and suffocation" (3). His ability to conceptualize the future, to think philosophically about his own life, is presented in opposition to the reflexive

[31] George Eliot, *The Lifted Veil and Brother Jacob*, ed. Helen Small (Oxford, 2009), 13. Further references are cited parenthetically.

mode of thought with which the body, automatically oriented to its own survival, navigates an immediate present composed purely of sensations.

Conversely, the other component of Latimer's "superadded consciousness," his insight into other minds, operates through those reflexes and sensations. His awareness of other people's thoughts is not a rational conceptualization of human psychology, but rather an immediate sensory experience of what is going on inside those around him. It is, additionally, an awareness that presents itself to Latimer involuntarily: "the obtrusion on my mind of the mental processes going forward in first one person and then another…would force themselves on my consciousness" (13). These mental processes take the form of what Lewes calls "our lower impulses," or the automatic reaction of nerves to systemic and environmental conditions such as hunger or cold (Lewes 2). While consciousness arises from the coordination of the "sum total of all the nerve-centres…each centre is itself a small sensorium." (Lewes 44). The higher orders of thought that take place in consciousness have "the noblest functions, but it does not exclude the other ganglia from their share in the general consciousness" (96). By contrast to the nobler faculties of mind, the nerve centers perform the more infantile function of asserting needs and, within the scope of simple reflexes, acting to address those needs. Accordingly, Latimer encounters the innumerable trivial and selfish sensations that precede conscious thought: "The rational talk, the graceful attentions, the wittily-turned phrases, and the kindly deeds, which used to make the web of their characters, were seen as if thrust asunder by a microscopic vision, that showed all the intermediate frivolities, all the suppressed egoism, all the struggling chaos of puerilities, meanness, vague capricious memories, and indolent make-shift thoughts, from which human words and deeds emerge like leaflets covering a fermenting heap" (*Lifted* 14). His insight

strips away the social personae that we consciously present to society, and uncovers instead organic life, the selfishness of an organism oriented to its own sensations and survival.

As Richard Menke has argued, Lewes's public defense of vivisection saturated the language Eliot uses in *The Lifted Veil*. Phrases like "naked skinless complexity" suggest to Menke that Latimer's ability to see into other minds is roughly analogous to the physiological insights Lewes uncovered by literally peeling back the skin of his (sometimes still living) specimens (*Lifted* 15).[32] Unlike Lewes's elaborate animal experiments, however, Latimer's mind-reading is not the result of deliberate study or even casual interest, but rather arises involuntarily despite his revulsion at seeing consciousness defrocked as a sensory-biological process. The preconscious cognition he uncovers in all those around him is depressingly uniform, a single pattern of sensory self-centeredness and non-rationality that collapses all humanity into that "fermenting heap." The uniformity of reflexive cognition in all bodies, including his own, burdens Latimer with the physiological awareness of what is going on within the (any) human subject. The only exception is Bertha, whose thoughts during their courtship he cannot read. The form of courtship appears to interpose *gender* as the primary difference between individuals, rupturing temporarily the physiological uniformity among bodies. Where Latimer can perceive the uniformity, however, neither love nor sympathy nor respect is possible due to the too-immediate connections that form among bodies understood to share the same abstract nervous system. If Lewes displaced thinking and feeling from the mind onto a network of nerves running throughout the body, Eliot imagines that network extending across bodies, plugging directly into the nerves of others.

[32] Menke, "Vivisection," 629-630.

Thus in Latimer's dual abilities, consciousness and preconscious cognition meet. For Lewes, consciousness was not a separate faculty but merely a secondary effect of preconscious cognition: an amalgamation of different sensory centers throughout the body, coordinated and combined with one another to produce the higher orders of thought. *The Lifted Veil* underscores this point straight away, by making Latimer's death the absolute limit of both his rational consciousness and his embodied impulses, locating both modes of thought exclusively in a living body. As consciousness comes only belatedly to this body, the power of the will to control and tame the nervous system's impulses was significantly weakened, according to Lewes's logic. That certainly holds true in *The Lifted Veil*, where Latimer's clear foreknowledge that he and Bertha would be miserable when married utterly fails to inflect or budge his conduct in the present. Abstract thought and circumspection cannot govern the impulses, in this case sexual ones, that arise from the body too quickly for consciousness to keep up. Even as *The Lifted Veil* lionizes the powers of consciousness as an almost magical ability to think beyond one's immediate present, the narrative also attenuates the power of consciousness to control the behavior of the body in that present—a body that interprets and reacts to sensations without the consent of the mind and that plugs into a network of nerves linking bodies together into collective reflexes.

The novella was well-timed. When Herbert Spencer in 1860 proposed that the population of Britain acted as a "social organism," he did so to articulate in pseudo-scientific terms the same idea that Eliot presented in gothic terms: the uniformity of the body's reflexive modes of thought across large groups of people. Just as statistical sociology usurped action from the individual agent and attributed it instead to unseen mathematical laws, physiologists indicated that much of an individual's behavior occurs independent of the faculties of conscious or moral judgment, and

arises instead from muscles and nerves that obey autonomic natural laws. Spencer sought to bring these two distinct developments together by using sciences of the body to explain both. The regular patterns of sociological behavior, he argues, "are neither supernatural, nor are determined by the wills of individual men." Instead, societies develop their organization according to the same autonomic rules that give order to the preconscious activity of the nervous system. Both social organization and complex organisms are, in Spencer's view, false unities—the heterogeneous parts assembled under those headings are always separately enacting their own distinct functions. For both society and organism, the integrity of the whole forms through the interdependence and coordination of innumerable parts, even while there is a "perpetual removal and replacement of parts." As Lewes argued, it is through the coordination of sensory awareness diffused among different ganglia throughout the body that the effect of consciousness comes about. For Spencer, whose physiological research concurred on that point with Lewes, the autonomy of each ganglion was of particular importance to his theory of the social organism: individuals need not understand abstract principles like the division of labor or the national interest, yet through the blind pursuit of their own welfare they nevertheless participate.

Spencer argued that the secret cause behind this coordination in both societies and bodies is the way they each evolve from simple to complex structures. At the end of a decade that saw an explosion of evolutionary theories, Spencer's evolutionary writings would eventually become his most influential work. At this stage of his career, however, his primary use of evolution was to prove that the working-together of autonomous parts was not the result of a unified overseeing consciousness or sovereign will. Which, in turn, meant new strategies of governance: a turn away from social legislation and towards building infrastructure in line with organic models found in the body, such as railways and telegraph wires that ought to observe the same

relationship to one another as nerves and arteries. It is because we all belong to essentially the same kind of body, the inheritor of an evolutionary prehistory of reflexes and impulses, that our ganglia harmonize into consciousness and individuals fall into regular patterns of sociological behavior. In order to transform individuals into coherent forms of mass behavior, Spencer calls upon the same uniformity of physiological processes underlying and shaping consciousness that, in *The Lifted Veil*, transformed the distinct individuals around Latimer into a single mass pressing in on him.

In *The Lifted Veil*, however, the connections formed through a collective nervous system render other forms of connection such as sympathy inoperable. The lower orders of cognition make human behavior predictable and uniform at the cost of defrocking individuals to reveal all the selfishness and irrationality of an organism that is nothing but a set of reactions to sensations. Spencer's essay would make the subject matter of *The Lifted Veil*, the idea that physiology could serve as the basis for collectivity, a topic of sustained discussion over the ensuing decades; but it was Eliot's depiction of lower-order cognition as mindless and contemptible that would prove the most prescient aspect of her novella. In the years leading up to and immediately following the 1867 Reform Act, liberal society contemplated extending the right to vote to certain pockets of the Irish and working-class populations.[33] The supposed cognitive deficiencies of these groups sparked an outcry among theorists of government who lamented the fall of reasoned discourse and the rise of demagogues who could manipulate these weak-minded new voters and meretriciously appeal to their blind self-interest. Jürgen Habermas identifies this broadening of the public sphere with increasing heterogeneity that left the liberal social body with little in common with itself: "The public was expanded…along with its social exclusiveness it also lost

[33] For a comprehensive discussion, see Robert Saunders, *Democracy and the Vote in British Politics, 1848-1867: The Making of the Second Reform Act* (Farnham, Ashgate, 2011).

the coherence afforded by the institutions of sociability and a relatively high level of education."[34] As Nicholas Daly argues, the idea that sensation could "capture and hold the attention of heterogeneous audiences can be linked to largely reactionary fantasies about the crowd in the years of Reform"—the fantasy that the masses thought with their bodies rather than their minds, making them more susceptible to collective sensations like spectacles than to ideas.[35] In this context, some moderate and conservative voices began to look favorably on the law of large numbers and the way statistical determinism prevented the newly enfranchised classes from upsetting the apple cart.

Walter Bagehot, one such moderate, looked to the nervous system as a way of making coherence out of a heterogeneous public and shaping behavior that was largely unchecked by reasoned discourse. As he wrote in 1867, "the active voluntary part of man" is not only "very small," it also draws "one man…off from the known track in one direction, and one in another; so that when a crisis comes together requiring massed combination, no two men [would] be near enough to act together."[36] Bagehot advocated staging spectacles and ceremonies of power that can "take the multitude [and] guide by an insensible but an omnipotent influence the associations of its subjects."[37] He points to the nervous system as the shared ground among the heterogeneous social body of post-Reform Britain and suggests that its capacity to act involuntarily, independent of will or rational judgment, can correlate the behavior of a mass that, as so many individuals, would each exercise consciousness differently. The mental deficiencies generally associated with mass behavior and the mindless reflexes of the nervous system thus formed a

[34] Jürgen Habermas, *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, trans. Thomas Burger and Frederick Lawrence (Cambridge: MIT, 1989), 131-132.
[35] Nicholas Daly, *Sensation and Modernity in the 1860s* (Cambridge, 2009), 5.
[36] Walter Bagehot, *The English Constitution*, ed. Paul Smith (Cambridge, 2001), 7-8.
[37] Bagehot, *Constitution*, 8.

common problem that, to some, afforded a common solution. The problem Eliot articulates in *The Lifted Veil*, that of a body that refuses individuality and instead joins into a collective network of nerves, became in the following decades the basis for a new trend in population management, one that seemed capable of dealing with the dense crowds of undisciplined bodies that threatened liberalism's republic of ideas.

In supplanting sympathy and respect, the connections formed through the body would appear to come at the expense of other kinds of intersubjectivity that previously provided liberalism's social glue. In what follows, I want to consider the possibility of turning that around—the possibility that Eliot establishes communication through the body as a form of connection when other forms of exchange aren't possible. If we read back through *Daniel Deronda* with that possibility in mind, it becomes apparent that the category of preconscious cognition forms the basis for connections between individuals even in the scene of sociology where they encounter one another anonymously with no grounds for reading, recognizing, or sympathizing. Existing criticism on *The Lifted Veil*, in seeking to downplay its dramatic differences in style and content from Eliot's more canonical fiction, has tried to find ways of viewing the novella as consistent with Eliot's interests elsewhere.[38] Menke's "Fiction as Vivisection" is especially compelling in this respect. He reads Lewes's physiology into the novella, aligning the automated action of the nervous system with novelists content to write characters as simple types, which Eliot—or rather, Lewes first and then Eliot later—criticized. The simple reflexes of nerves in response to sensations are like characters who predictably enact the type they are supposed to represent, instead of developing as psychologically complex (i.e.,

[38] In addition to Menke, see Terry Eagleton, "Power and Knowledge in 'The Lifted Veil,'" *Literature and History* 9, no. 1 (Spring 1983): 52-61, Kate Flint, "Blood, Bodies, and *The Lifted Veil*," *Nineteenth-Century Literature* 51, no. 4 (March 1997): 455-473, and Adela Pinch, *Strange Fits of Passion: Epistemologies of Emotion from Hume to Austen* (Palo Alto: Stanford, 1997).

unpredictable) individuals. Lewes, however, never addressed the collectivizing function of the nervous system. The experiments he conducted were on isolated specimens, abstracted from collectivity, and he did not consider how the organisms he studied might form collectivity in new ways. As a result, the dynamics of collectivity in *The Lifted Veil* are similarly absent from Menke's account, which instead shows how the thinking that takes place in the body falls short of the standards for writing character Eliot lays out in "The Natural History of German Life."

There is, indeed, a critical tendency to find ever new tools to explain how Eliot went about doing what we already agreed she was doing—a notion of her ambitions for writing fiction that derives largely from that essay and other writing from that early period in her professional life when she was associated with *The Westminster Review*.[39] By substituting *The Lifted Veil* for "The Natural History of German Life" as a companion to her longer fiction, we can see how Eliot updated her thinking alongside new developments in physiological science, especially as it related to sociology and population management. In short, the valence of the body changes in *The Lifted Veil*, no longer the source of embodied experience that sociological abstractions distort, but rather a mode of thought that can forge connections between individuals who are otherwise anonymous to one another and undifferentiated from the groups to which they belong.

Daniel Deronda Revisited

Eliot's use of crowds has been a topic of particular interest to recent scholars, who have identified the crowd as Eliot's tool of choice in her self-conscious attempts to test the limits of what narrative can represent as meaningful within the scope of an individual's personal history.

[39] S. Pearl Brilmyer's "Plasticity, Form, and the Matter of Character in *Middlemarch*" *Representations* 130, no. 1 (Spring 2015): 60-83 is a particularly intelligent example, arguing as she does that Eliot's familiarity with the science of proteins allows us to track a critically well-documented relationship between particularity and abstraction through Eliot's metaphors of character-as-matter. On the relationship between particular and abstraction in Eliot's fiction, see Gallagher, "Immanent."

Whether motivated by the ethical stakes of blotting out the lives of the many by cultivating readerly fascination with the lives of a few, or by the formal challenge of representing social totality grown too big to be apprehended through personal experience, Eliot has been understood to structure her novels with events that concern the sociological whole but register as meaningless within the lives of particular individuals. Gage McWeeny has argued that the figure of the stranger in Eliot's fiction—or rather, the pressing in of many strangers in the form of crowds—supplants "the coherence-bestowing effects of plot or narration" with the unintelligibility of modern social experience, "social and informational 'noise' that is produced by the novel's expansiveness and complexity."[40] Emily Steinlight has traced the tension in Eliot's work between "life not only in the biographical sense of lived experience but also in the totalised biological sense captured by vital statistics."[41] "The probabilistic systems that make chance governable" at the level of the population, Steinlight argues, introduce randomness and unpredictability into the lives of individuals.[42]

As I have argued so far, when viewed through the lens of "The Natural History of German Life," those dimensions of Eliot's fiction threaten to erode any particularities of characters that would at least partially distinguish them from their sociological categories. Assembling the collectives of Victorian sociology does not simply expose characters to encounters with strangers and to the randomness of pure chance. Statistical sociology posited an entirely different kind of individual, one evacuated of moral agency and furnished instead by the internalization of collective trends. *Daniel Deronda* plays out before the reader's eyes the way action gets displaced from internal mechanisms, shaped over a lifetime, onto the prescriptions of

[40] McWeeny, *Comfort*, 65.
[41] Steinlight, "Killed," 165.
[42] Steinlight, "Killed," 167.

social statistics. Individuals subject to the rules and contingencies of the law of large numbers occupy a fundamentally precarious relationship to their identities and social positions. Their modes of life do not manifest in their bodies and minds as habit that molds character. As Sally Shuttleworth has explained, "memory" serves an important function in Eliot's writing, as an embodied faculty that records moral deliberations of the past so as to shape actions in the future—"character" becoming something like the ever-evolving amalgamation of memory that molds vital force into a social persona.[43] By contrast, when character has to form within the dimension of abstract social sciences, those characters are left formless in terms of moral habits, as the sensory experiences and social conditions belonging to particular modes of life get replaced by abstract uniformity.

Yet *The Lifted Veil* indicates that Eliot was well aware of the way body sciences in the later years of the 1850s developed away from the older idea of the body as a repository where repeated acts of thought were made durable as habit. Whereas associationist psychology since the eighteenth-century philosophy of David Hartley had rested on that belief, the rise of experimental physiology and evolutionary science broke from that tradition. Physiologists emphasized instead the nervous system's capacity to react to sensations independently of consciousness, in addition to the evolutionary inheritance of instincts that allowed those nerves to interpret and respond to sensations correctly.[44] Physiologists no longer regarded the body primarily as a warehouse for the familiar, a place where transient experiences forgotten by the mind continued to inform action; to the contrary, the physiological body became increasingly unfamiliar and impersonal, animated by the pre-social history of the human species rather than

[43] Sally Shuttleworth, "'The Malady of Thought': Embodied memory in Victorian psychology and the novel," *Australasian Victorian Studies Journal* 2 (1996): 1-12.
[44] See Rylance, *Psychology* for a discussion of the Victorian break from earlier associationist psychology.

the personal history of sensations attached to a particular body. How would this updated nervous system reframe *Daniel Deronda*'s crowd scenes as something other than simply a milieu hostile to gradual development over time? What happens to the category of preconscious cognition in the scene of sociology?

As Steinlight and McWeeny attest, Eliot depicts the statistical social sphere as a field populated by strangers in which events are governed by sheer, meaningless chance. More than any of her novels, *Daniel Deronda* self-consciously foregrounds those conditions. In the crowded gambling hall, Daniel and Gwendolen not only encounter an anonymous crowd, they also are nothing but anonymous members of that crowd to one another. The scene is crowded with people who mean nothing to either Daniel or Gwendolen, and governed by a merciless chance that has no compunction about taking Gwendolen's winnings at random. For Daniel and Gwendolen to encounter one another and establish a personal connection, on the one hand, is as much a matter of chance as any spin of the roulette-wheel, yet, on the other hand, transforms this scene of meaninglessness into a meaningful event in each of their lives. It is not that Daniel and Gwendolen transcend the scene of sociology in meeting, but rather that they manage to inhabit and navigate it in a very fortuitous manner. A catastrophic gambling loss would follow the same logic: just another spin of the wheel that contributes to a predictable pattern in the aggregate of cases, yet much more than that within an individual's life.

It is the involuntary impulses that occur without the bidding of consciousness and too fast to be suppressed or examined that, for both Daniel and Gwendolen, inflect the way those chances play out. On first seeing her, Daniel experiences "the wish to look again" as "coercion and not as a longing in which the whole being consents…his attention was arrested" (*Deronda* 3-4). Gwendolen, in turn, finds her visual survey of the room interrupted by the involuntary action of

her eyes: "she was unpleasantly conscious that they were arrested—how long?" (5). What happens in the body without conscious control or any rational basis proves to be the most effective mode of interaction with this environment, of adapting to the speed of moving bodies and the intervals of the wheel to establish eye contact at the right moment. By the time consciousness becomes aware of what the body is doing, the chaos of the crowd has already been transformed and their connection forged. There is no buried secret to explain these impulses as a subconscious expression of something else. The behavior of the body in these preconscious moments simply arises with the same mysteriousness as that with which Latimer's insights arise.

This magnetism should not be mistaken for the logic of separate spheres or any sort of sentimental connection that develops in opposition to the impersonality of a bustling public. It is, instead, a connection that expresses itself purely through the rhetoric of chance and statistics. Following their mutually arrested attention, Gwendolen feels she cannot return to "stand at the gambling-table with the risk of seeing Deronda" (15). It is the risk of seeing him that now organizes Gwendolen's encounter with the crowd. Their relation to one another is merely the probability of two units of a larger group coming into contact with one another, but it is the way Gwendolen finds her attention involuntarily oriented to that probability that shapes the scene.

Catherine Malabou, synthesizing some of the most influential twentieth-century theories of the crowd, identifies undifferentiated anonymity ("the possibility of being everyone without being anyone in particular") as the primary feature of mass belonging, which makes the crowd a vehicle of self-transformation (identity becomes a series of disposable masks that each reflect the composite identity of the group) even as it also means alienation from any other individual within that group.[45] Having been forced to pawn a necklace after leaving the roulette-table and

[45] Catherine Malabou, *What Should We Do With Our Brain*, trans. Sebastian Rand (New York: Fordham, 2008), 30.

receiving news of her family's ruin, Gwendolen finds to her humiliation that someone has anonymously returned the necklace to her wrapped in a handkerchief. "A large corner of the handkerchief seemed to have been recklessly torn off to get rid of a mark; but she at once believed in the first image of 'the stranger' that presented itself to her mind. It was Deronda" (*Deronda* 14). The anonymous handkerchief acts as an avatar for the faceless crowd that observed her, an anonymous voice that articulates a generalized judgment on Gwendolen that could potentially have come from anyone who had been present. Yet "Deronda" is how Gwendolen automatically interprets it: it is his face and eyes that she imaginatively assigned to this latest mask through which the crowd presents itself to her. By associating his name with the handkerchief, she does not imbue it with any additional meaning or personal significance—by personifying the crowd, he has become in her mind the mask of the crowd, constituted more than ever by its composite features. This ascription of Daniel's name to the anonymous note in no way refines Gwendolen's sense of his particular identity or interest in her. His face is simply the one she, for reasons unknown, picks out as the face she projects onto the crowd. Whether she is right or wrong in her guess, the effect of her automatic and unreasoning impulse of thought is to personify the anonymous crowd and to register the vagaries of chance as meaningful.

The novel reproduces the same scenario when Daniel and Mirah meet, which is an encounter that bears all the hallmarks of how people encounter one another in a crowd. Even though they are the only two present, it is all the more striking how sociological personhood not only gives order to urban life but also colonizes every avenue of experience. Daniel's position, gliding down the river singing to himself, could hardly figure "detachment" more forcefully, a forerunner to the disengaged *flâneur* Charles Baudelaire and Walter Benjamin view as

emblematic of the alienation produced by nineteenth-century mass culture.[46] The yet-anonymous Mirah appears to Daniel in strictly typological terms, a "pale image of unhappy girlhood," someone anchored in place by her apparent occupation of washing clothes on the river bank, in contrast to Daniel's mobility (159). He indulges in precisely the kind of "typing" that Eliot deplores in "The Natural History of German Life," a convenient way of grafting a basic narrative onto bodies that exhibit signs of belonging to a certain social category. Daniel, as though he has read that essay himself, soon "smile[s] at his own share in the prejudice that interesting faces must have interesting adventures," remembering that "poorly-dressed, melancholy women are common sights." "The next instant" they are no longer in sight of one another: Mirah's absorption in her task at the riverbank and the current moving Daniel downstream reproduce the temporal intervals and spatial relationships of urban encounters, where public transportation moves bodies through space too quickly for social connection to occur and growing population density makes passersby something to be ignored rather than something that attracts attention.

And, indeed, on Mirah's side of things, Daniel is not perceived with any greater clarity. His singing is like "an insect murmur amidst the sum of current noises," which is not even Mirah's perception proper, but a diffused—almost atmospheric—sensation common to Mirah and the anonymous "three or four persons [who] had paused…and doubtless included in their notice the young gentleman in the boat." Lewes's account of particular sensations in the midst of a crowd of sensations dovetails with the way perception works in this scene: Attention, he writes, serves "to *isolate* one sensation from *crowd of simultaneous sensations*; nay one may ask whether attention itself be anything more than that very isolation of one sensation from the crowd?" (Lewes 51 *original emphases*). "During the performance of an orchestra we may single

[46] See Walter Benjamin, "Baudelaire, or the Streets of Paris" in *The Arcades Project*, trans. Howard Eiland (New York: Belknap Press, 2002).

out a particular instrument, or group of instruments, following them with attention…because we have isolated that sensation from the harmonious concord of sounds, amid which these instruments move, we perceive sounds which before were unperceived…merged in orchestral thunder" (Lewes 52). In the scene on the riverbank, Eliot submerges Daniel ("an insect murmur") within what Lewes calls a "crowd of simultaneous sensations" ("the sum of current noises"). But Eliot underscores the way that "sum" constitutes a set of shared sensations common to any percipient body in the area. Lewes's orchestral example remains fixed to the perspective of a particular observer in the midst of a crowd of sensations, whereas Eliot thinks about a crowd of sensations in relation to a crowd of people. And just as Mirah's perspective is undifferentiated from the perspectives of the other incidental passersby, Daniel experiments with diffusing himself out into the impersonal sensations waiting to be had in the world around him, becoming nothing but the perceptions shared by anyone else on the scene: "He was forgetting everything else in a half-speculative, half-involuntary identification of himself with the objects he was looking at, thinking how far it might be possible to habitually shift his centre till his own personality would be no less outside him than the landscape" (*Deronda* 160). In many ways a rewriting of Daniel and Gwendolen's chance encounter, this meeting of Daniel and Mirah appears to dip into the line of thinking about a collective nervous system and collectivizing sensations pioneered by Spencer and Bagehot.

Whether in the crowd of anonymous bodies surrounding Daniel and Gwendolen or in the crowd of collective sensations surrounding Daniel and Mirah, these particular individuals are differentiated from their surroundings in one another's eyes thanks to the way the nervous

system distributes its attention.[47] As Lewes argued, a single stimulus lost amongst a crowd of other stimuli can become distinct when it suddenly ceases: "in common language we are said not to hear the particular instruments [merged in orchestral thunder], when we cannot separately follow them. Yet nothing is more certain than that we do hear them. We are affected by them. Suddenly silence those instruments in the very climax of a crescendo, and the storm of the others will not prevent our distinctly perceiving *some* difference (Lewes 52 *original emphasis*). We may not be able to isolate that sensation and make it the object of our conscious attention until it stops, at which point we recognize that it had been registered all along by the sensory nerves. In precisely that manner, Mirah's body alerts her mind to the impression Daniel had made on her without her conscious knowledge: "Apparently [Daniel's] voice had entered her inner world without her having taken any note of whence it came, for when it suddenly ceased she changed her attitude slightly, and, looking around with a frightened glance, met Deronda's face" (*Deronda* 159). Daniel's singing, which "was unconsciously giving voice" to her misery, had transfixed her body before she had consciously identified it as a distinct sensation, leaving her "hands…hanging down clasped before her, and her eyes…fixed on the river." It is Mirah's posture of absorption that causes a reciprocally "strong arrest of [Daniel's] attention [and] made him cease singing." Daniel's own attention is drawn automatically to Mirah's attitude of arrested attention, all within the space of an instant before they lose sight of one another. It is worth stressing that Mirah does not merely arrest Daniel's attention; rather, it is her attitude of arrested attention that Daniel finds himself mirroring. That attitude of attention seems to transfuse itself directly from Mirah to Daniel before either of them has even realized their own absorption, in a

[47] For a detailed account of Eliot's interest in the physiological distribution of attention choreographed aesthetic forms, see Nicholas Dames, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, 2007).

direct communication between bodies in their preconscious moments reminiscent of *The Lifted Veil*. When returning upstream some time later, Daniel's "darting presentiment" about Mirah (who is now merely a "moving figure" in his peripheral vision) arises with the same inexplicable force and specificity as Latimer's insights, and correctly interprets the meaning of minor sensory details (160). Specifically, whereas his typological assessment of Mirah cast her as a melancholy washerwoman, his "presentiment" corrects this impression: when she has moved to become a mere "insect murmur" on the edge of his field of perception, well outside the range of his conscious thoughts, he reinterprets the cloak Mirah soaks in the river as preparation to drown herself.

Mirah herself, then, is poised to become one life among the "insect murmur" of many lives, undetectable within sociology's collectives, yet presumably to be felt in its sudden absence by those who knew her as more than a unit of a statistical totality. Suicide, as Hacking recounts, was perhaps the single most prominent arena in which Victorian culture confronted the paradoxes of sociology and the apparent determinism of statistical rates. As an exceptional and aberrational occurrence—increasingly regarded as a mental illness—suicide was unlikely material for statisticians' efforts to track regular patterns of social behavior. Yet suicide rates per year were among the most stable statistical patterns from which social scientists derived confidence in the law of large numbers.[48] Especially with fiction of the era in mind, it is difficult to separate the action of committing suicide from the internal conflict and deliberation that that action implies. Add to this that, since the middle ages, suicide was widely viewed as a theft from God, to whom life originally belonged; and that in early modern Europe it was regarded as treasonous to subvert one's life from its place within the body politic—and it becomes eminently

[48] See Hacking, "Suicide is a kind of madness," *Taming of Chance*.

clear how thoroughly social statistics disrupted entrenched ways of thinking about action, even as those older ideas lived on within moral discourse that understood action to be motivated by personal volition. According to those older logics, suicide was a place where an individual's life became the site of a contest between individual self-possession and the claims of hierarchy on its members. Statistics completely re-works that setup: to commit suicide is no longer to detach one's life from its context, but rather to surrender it to the determinations of statistical regularity. In Mirah's case, it is at least indirectly the effects of sociology that actually drove her to the point of drowning herself: she has been separated from her family and lost within an anonymous London public that refuses to yield up particular individuals from its ranks—that refuses to stage a reunion when the odds of her happening to find them are so small.

For Daniel to intervene at the precise moment when the abstract rate of suicide was in the act of claiming Mirah is itself a matter of chance. It is not that, since statistics made suicide predictable, Daniel can thus predict Mirah's. To the contrary, it requires all the speed Daniel can muster to interpret and act on signals from his environment in time to prevent her. And this all takes place within him in the time it takes to "turn his glance thitherward." "A sense of something moving" almost outside his line of sight compels him, as though from outside himself, to turn, and imparts to his mind that "darting presentiment." The odds of Mirah being averted from her course when she had deliberately picked a secluded spot are small—perhaps smaller than the odds of her finding her family. Much like Daniel and Gwendolen's coordination and timing at the roulette-table, it requires this faster mode of thought to inhabit and navigate such instantaneous moments of time as the theoretical point at which disembodied rates of action and actual bodies meet.

CHAPTER FOUR

Deep Time, Emergency Time, and the Late-Victorian Novel

Two recent critical movements have positioned the Victorian novel in ostensibly contradictory orientations to the physiological senses. On the one hand, critics have recently recuperated nineteenth-century physiological sciences and their influence on Victorian novelists to show how fictional worlds were formulated strictly in relation to the sensations of a reader's body.[1] On the other hand, conversely, the burgeoning scholarly interest in anthropogenic climate change has prompted a growing number of critics to argue that post-industrial fiction houses the super-sensory dimensions of deep time and global space, the dimensions in which the aggregated agency of the human species has come to shape our climate.[2] How can Victorian novels simultaneously address themselves directly to the nervous system yet also narrate scales of space and time unavailable to the physical senses? How, in other words, does the sensory-biological subject posited by Victorian physiology interact with the planetary scales being built on to novelistic worlds at the end of the Victorian era? This chapter is concerned with adventure tales and cosmopolitan novels that, in moving characters through the circuits of empire and subjecting the local to the tides of international politics, answer those questions by synchronizing their characters' lives within global populations.

H. Rider Haggard's 1885 *King Solomon's Mines* traps a group of British explorers below ground in an ancient African mine, forcing them to inhabit the deep time posited by Victorian

[1] See Nicholas Dames, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford, 2007), and Benjamin Morgan, *The Outward Mind: Materialist Aesthetics in Victorian Science and Literature* (Chicago, 2017).
[2] See Jesse Oak Taylor, *The Sky of Our Manufacture: The London Fog in British Fiction from Dickens to Woolf* (Charlottesville, Virginia, 2016), and Morgan, "After the Arctic Sublime" *New Literary History* 47, no. 1 (Winter 2016): 1-26.

geologists. The geological record, whose size both indexes and dwarfs the entirety of human history, renders the time kept by their watches meaningless in the face of species time. Faced with spending the rest of their lives there, the explorers at first strike matches to see their watches, watching time pass in order to pass the time, only to lapse soon after into a kind of numbness to their own sensory experience. Geological time registers on Haggard's explorers as sensory deprivation as they stand suspended within a timescale whose increments are too long to be perceived within a lifetime let alone moments of conscious perception. In Joseph Conrad's *The Secret Agent* (1907), an anarchist network plotting to disrupt as much of organized life as they can settles on Greenwich Observatory, and with it the standardization of global time, as their target. When their bomb detonates (ironically not at the right time), its explosion occurs too rapidly for the young man carrying it to feel his own mutilation. In plotting all of organized life on a single temporal grid from the everyday down to moments of emergency, standardized time consists of such minute temporal intervals that perception cannot keep up. Imperceptibly small and incalculably immense, the experimental timescales of *King Solomon's Mines* and *The Secret Agent* lie to either side of the scales of conscious experience where individuals can directly perceive the world they inhabit.

Two scales of time, cultural history and individual development, have been the default for theories of the novel focused on the production of the nation-state and an individual to populate it. By viewing *King Solomon's Mines* and *The Secret Agent* essentially as historical novels—by asking what forms of community inhabited by what configurations of life novels fiction derives from the deep time of the planet and the standardized time of global networks and mass culture—I want to modify our assumption about whose history novels tell. In opening their novels up to a transnational scope, Haggard and Conrad supplant those narrative temporalities

with timescales of the species and of the global mass. In what follows I discuss each of their respective timescales in relation to Victorian physiological science in order to explain how these temporalities take hold of bodies and, in both novels, synchronize the actions of thousands upon thousands. In is, in particular, the way physiologists stressed the body's capacity to act impulsively before consciousness kicks in that proves crucial to how that body inhabits the globe. The collective action in *King Solomon's Mines* that combines European and African arises from those preconscious moments when large numbers of bodies act on the shared instincts that the species acquired over the course of geological time. For Conrad, the global mass targeted by the anarchists acts as a single swarming organism, which forms as standardized time takes hold of bodies through their mindless modes of thought, scheduling their habits and automated routines into coordinated patterns of behavior.

The deep time of the species in *King Solomon's Mines* and the compressed rubric of emergency time in *The Secret Agent* detach the body's action from volition and conscious intent, placing it instead under the sway of nonconscious modes of thought, instinct and automation.[3] In outlining how physiologists in the latter half of the nineteenth century developed and theorized the nonconscious dimensions of embodiment, I show how those modes of thought came to be understood in conjunction with collective behavior. At ever larger scales of global collectivity, these novels push the physiological body into the limelight as a key locus of transnational encounter—the basis for points of affective commonality, but also a universal backdrop for gaming out cultural difference.

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[3] Dierdra Reber, writing about a more recent and globalized literary tradition, has recently forged this connection by suggesting that the possibility of imagining humanity acting and feeling *en masse* depends on a shared mechanism of embodied affect. In order for "humanity [to be] gathered in the unity of common positive feeling" visualized by global capitalism, she argues, the Cartesian *cogito* had to be replaced over the course of the intervening centuries with what she calls "the feeling *soma*," or a mass body "heterogeneous and unified, bound together in the same principles of autonomic internal functioning that guide any living organism." See Reber, *Coming to Our Senses: Affect and an Order of Things for Global Culture* (New York: Columbia, 2016), xiii.

Both timescales operate with the dynamics of the sublime, assembling populations at such immense scales that they threaten the coherence of the individual as an actor category. Calling on theoretical models formulated in recent critical discussions of climate change and nuclear criticism, I argue that in both novels humanity in the aggregate wields an agency and experiences a vulnerability that is undetectable in individuated bodies. In *King Solomon's Mines*, these qualities are undetectable in individuated bodies, which lapse back into the temporal routines associated with Britishness when removed from the vicinity of the geological record. In *The Secret Agent*, however, in the cognitively deficient young man tasked with setting the bomb we see an image of humanity in the age of mass culture, weak-minded and incomplete when isolated and easily swayed by those around him. His complete mutilation at the hands of the bomb points to the kind of "disfiguration" Davide Panagia calls a rupture of "our received wisdoms and common modes of sensing… Such moments of interruption…are political moments because they invite occasions for reconfiguring…the correspondence between perception and signification," or the *de facto* cultural and conscious meanings used to interpret the immediacy of bodily sensations (Panagia 2-3, 5). Forced in both novels into scales of time that we inhabit only collectively, as species or mass, the body is reformulated in the context of the globe, melted down into a quantity of amorphous flesh that can hold the form of individuality only imperfectly.[4] In both novels, the persistent disruption of perception when bodies fall into the grip of supersensory timescales allow us to read the global scales of late-Victorian fiction in terms of what they elicit from the bodies that inhabit them, and how the actions that join

[4] The photo-negative of this conjunction between the inner processes of the human organism and the behavior of humanity in the aggregate emerges in Thomas Pfau's argument that modern philosophy has displaced action from moral rationality and relocated it in "a wholly deterministic account of human consciousness and action," both at the "neuro-scientific" level of the individual and at the level of "our biological, carbon-churning species," thus forcing us to "logically abandon the notion of the human as a distinctive intellectual and ethical agent." See Pfau, *Minding the Modern: Human Agency, Intellectual Traditions, and Responsible Knowledge* (Notre Dame, 2013), 15.

individuals to global collectives, in momentarily overriding differences of race and nation, renegotiate the meanings we assign to the body's nonconscious behavior.

Political Physiology

The pattern of behavior I am calling the mass developed during the second half of the nineteenth century as liberalism, sociology, and cultural criticism increasingly ascribed actions and feelings to groups and crowds in their own right. The tendency of collective feeling to overwhelm an individual's capacity for self-government had been acknowledged at least since the early eighteenth-century discourse on the political dangers of enthusiasm, and became especially visible over the course of the Victorian era in John Stuart Mill's attempts to safeguard individual judgment against the coercion of mass behavior and Gustave Le Bon's 1897 condemnation of crowd psychology.[5] In the first half of the nineteenth century, Thomas Carlyle identified mass behavior, or the union of many minds into a single will, with crowds that formed as spectacles of working-class unrest.[6] In that era, as John Plotz has argued, the organization of coordinated public demonstrations largely in the name of the Chartist movement turned the spectacle of crowd formation into a representational strategy that started to count as a form of political speech.[7] By the end of the century, however, it had become far less common to hear political commentators speak of crowds as spectacles or distinct events, and more common instead to find the crowd referenced as a condition of the everyday in markets, public transportation, and urban life.[8] Following the 1860s, the crowd went from being a spectacle intentionally organized for a political cause, posing a material threat to social order, to a feature

[5] See Shaftesbury, *Letter Concerning Enthusiasm* (1707), Mill, *On Liberty* (1859), and Le Bon, *The Crowd* (1897).
[6] See Carlyle, *The French Revolution* (1837) and *Chartism* (1840).
[7] See John Plotz, *The Crowd: British Literature and Public Politics*, (California, 2000), 7-12.
[8] See Richard Menke, *Telegraphic Realism: Victorian Fiction and Other Information Systems* (Palo Alto: Stanford, 2007) and Nicholas Daly, *The Demographic Imagination and the Nineteenth-Century City: Paris, London, New York* (Cambridge, 2015).

of the social order in its own right—a kind of predictable disorganization inherent to the sociologically rendered public.[9] In concert with the rise of sociology, the rhetoric of statistics established itself as a descriptive mode essential not only to delineating the British public as a sociological abstraction, but also to situating and contextualizing first-person perspectives within that public. When, for instance, Charles Dickens has Oliver Twist first encounter London's urban masses, what Oliver encounters as a spectacle of pure sensory chaos in 1837 is transformed in Dickens' later novels into a more intelligible population measured in "millions of feet" surrounding the steps of his central characters, thousands of pauper deaths annually replicating those his novels depict individually, and even convicts with numbers affixed to their backs who mark the point at which extraneous human life turns into statistical information. As a paradigm for representing a populations as something in need of constant management, the crowd emerged as a figure that transformed so many citizens of a self-governing liberal society into the mass behaviors—measured in terms of rates of mortality, birth, consumption, labor, sickness, and crime—that sociology takes as its object.

By subordinating individual rationality and conscious self-determination to trends at the level of the population, the uptake of sociology into political and cultural commentary raised a set of questions around what it meant to be an individual within a social body that appeared to move, think, and feel in its own right. Matthew Arnold's 1869 *Culture and Anarchy* marks the point at which it had become impossible to speak exclusively about crowds as discrete events that occur among the working classes, and had become necessary instead to think about the crowd as a universal feature of the public sphere whose effects had to be managed within the individual. In the act of decrying the "multitudinous processions in the streets of our crowded

[9] On the way statistical sociology transformed the disorderly behavior of urban populations into orderly representations see Audrey Jaffe, *The Affective Life of the Average Man: The Victorian Novel and the Stock Market Graph* (Columbus: Ohio State, 2010), 9-15.

towns" that led to the smashed railings in Hyde Park, Arnold finds it necessary to downplay the significance of such "demonstrations [as] perfectly unnecessary in the present course of our affairs" and instead suggests that the future of British culture depends on protecting the powers of the individual mind from the disordered behavior bodies acquire from one another in large-scale collectivity.[10] It was in this light that crowds appear most prominently for political commentators and cultural critics in the late Victorian imaginary, as a set of lamentable effects on the mind of anyone who belonged to them.

As Walter Bagehot attests, the cognitive characteristics of the working-class populations enfranchised by the 1867 Reform Act left many liberals "exceedingly afraid of the ignorant multitude of the new constituencies" due to the effect they would have on the public discourse and collective ideas that all voters of any stripe must participate in. It was not simply that the "the poorer and more ignorant classes—those who would most feel excitement, who would most be misled by excitement" would have a say in shaping the substance of state policy, but, moreover, that their addition would make "democratic passions [that] gain by fomenting a diffused excitement, and by massing men in concourses" the new form for political discourse.[11] The form of liberal individuality, as Elaine Hadley has shown, was an abstraction embodied by a liberal public as "cognitive formalisms," or states of mind that made individuals eligible for political agency and positioned them within a range of moderate opinions on matters of public debate.[12] For the liberal public to take on the features of the crowd in the mid Victorian era was thus not simply to assail private individuals with more noise and bustle in public spaces, but to change the inner processes of the individual who embodied various opinion-positions within that public. So it was that, even in the years preceding the 1867 Act, Mill makes "society" a synonym

[10] Matthew Arnold, *Culture and Anarchy*, ed. J. Dover Wilson (Cambridge, 1986), 91.
[11] Walter Bagehot, *The English Constitution,* ed. Paul Smith (Cambridge, 2001), 17, 193.
[12] See Elaine Hadley, *Living Liberalism: Practical Citizenship in Mid-Victorian Britain* (Chicago, 2010).

for the crowd, whose shared behavior and affect undermine the capacity for original thought: "Society has now fairly got the better of individuality… at present individuals are lost in the crowd…the mind itself is bowed to the yoke: even in what people do for pleasure, conformity is the first thing thought of…until by dint of not following their own nature they have no nature to follow."

Mill's concerns are echoed by many political commentators who registered much the same alarm at finding liberal states of mind starting to resemble the cognitive mode proper to the crowd. As discussed in the previous chapter, for Bagehot, government in the second half of the century became a matter of getting the nervous system's involuntary behavior and feeling to act a certain way. Just as Mill says the lower orders of thought—habit, reflex, imitation—are what the crowd produces and determines in individuals, Bagehot says that managing and manipulating those unconscious modes of thought is key to shaping the behavior of crowds. In contrast to bodies posited by earlier psychological models like phrenology or physiognomy that located character in inalienably fixed features of a particular body, physiology theorized an abstract nervous system common to the entire species and defined individual subjectivity as the interaction between a nervous system and its environment. Thus Bagehot seizes on the physiological nervous system as a way of mediating between the potential disorder of individuality and what he calls the "massed combination," or the predictable and coordinated behavior that sociology measures and regulates at the level of large numbers. For Bagehot, as for liberal physiologist Herbert Spencer, the mode of thought that takes place in the body is the secret to how supposedly autonomous individuals actually form a single social organism. Bagehot identifies the efficacy of British government in its tendency to stage spectacles and ceremonies of power that, in effect, manage the sensorial lives of the population so as to "take

the multitude [and] guide by an insensible but an omnipotent influence the associations of its subjects." Bagehot advocates governing by taking the nervous system as the shared ground among the heterogeneous social body of post-Reform Britain and using its capacity to act involuntarily, independent of will or rational judgment, to correlate the behavior of a mass that, as so many individuals, would each exercise consciousness differently.

Physiologists beginning in the late 1850s formulated this nervous system, which supplanted the centralized mind with a network of cognitive centers distributed throughout the body. As Lorraine Daston explains, "the traditional mental phenomena of volition, sensation, emotion, and consciousness itself were, if not wholly excluded from psychology, to be paired with, or reduced to, neural excitations and localized to particular cerebral centers."[13] As Lewes's *Physiology of Common Life* demonstrated, electrical stimuli produced reflexive actions that had every appearance of volition and intentionality—even when the acting subject was an etherized frog whose brain had been taken out.[14] In order to establish some rules that could explain why the nervous system behaved as it when acting outside conscious control, Spencer posited a distinction between *sensation*, or raw sense-data in the nerves, and *perception*, or sense-data that has been edited and parsed into meaningful representation within consciousness. As he writes in 1866, "out of a great number of psychical action going on in the organism, only a part is woven into the thread of consciousness."[15] The sensations experienced by the body exceed the limited set of sensations that get passed upstairs to the mind as conscious perception. The nervous system thus not only acts more quickly than the pace of consciousness, but also acts in response to a larger sensory data-set.

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[13] Lorraine Daston, "British Responses to Psycho-Physiology," *Isis* 69, no. 2 (June 1978), 196
[14] G.H. Lewes, *The Physiology of Common Life*, vol. I (Leipzig: Bernhard Tauchnitz, 1860), 48.
[15] Herbert Spencer, *The Principles of Psychology* (London: Longmans, 1855), 195.

This branch of science forms the basis for what Nicholas Daly has identified as the signature of "cultural artifacts of the 1860s," or the "use of sensation to capture and hold the attention of heterogeneous audiences [which]…cannot be seen in any straightforward way as simply disciplinary apparatuses in the Foucauldian sense."[16] The physiology of sensation in the 1860s, as Daly indicates, did not conform to the Foucauldian schematics of government. The physiological nervous system constituted a significant departure from the early associationist psychological model that informs Jeremy Bentham's influential panopticon writings, and, by extension, the Foucauldian logic of discipline derived from them. Although recent scholarship has challenged Foucault's hold on Victorian studies by pointing out how his loose interpretation of Bentham's work takes him outside the sphere of what was conceptually available at the time, I want to underscore the associationist theory of sensation that Foucault faithfully *does* retain from Bentham's thinking, a psychological model with a definite shelf life in the nineteenth century. The argument Foucault outlines in *Discipline and Punish* defines subjectivity as a technology of power, a way of coding norms in behavioral terms morally and libidinally mandated from within the self. The emphasis on popular sovereignty in the modern era, and in British liberalism in particular, leads Foucault to search out the institutional production of individuals capable of governing themselves. Taking Bentham's experimental prison, designed with rehabilitation in mind, as the central logic of modern subject production, Foucault transforms nearly all forms of social visibility and institutional supervision into "surveillance." The sense of being watched replicates the effects of punishment and reward that Bentham suggested could be used to reform criminals by reorienting their behavior in relation to pleasure and pain. The associationist school of psychology achieved special prominence in the empirical models of mind put forward by John Locke and David Hume, which denied the existence of innate mental faculties such as

[16] Nicholas Daly, *Sensation and Modernity in the 1860s* (Cambridge, 2009), 5.

imagination, fancy, and memory. Instead, sense data taken in through the body is organized around two poles of feeling, pleasure and pain. The unique configuration of experiences clustered around each pole over the course of a lifetime produces individual character and a sense of value, giving order to the way an individual thinks, feels, and reacts to subsequent stimuli. As Rick Rylance explains, past associations "regulate the flow of sensory data and prevent the mind becoming an inferno of chaotic and random stimuli. For assocationists, the mind is thus self-organizing around the initiatory clusters."[17] This, in other words, is the science that gives Foucauldian discipline its teeth, the logic that explains how regimes of discipline enforced on the body produce a socially harmonized mind by regulating through punishment and reward the associations that form within a subject. Rylance's history of British psychology carefully limns the point at which the later materialist tradition had effectively turned against its own Benthamite genealogy. Whereas for associationists, action, thought, and feeling are refracted through the prism of a personalized history of sensation, by contrast the physiological body acts, without review or regulation of the mind, on impulses acquired not from its own memory of past sensation but from the evolutionary pre-history of the human species. As a result, physiologists abandoned the vocabulary of associationism that discussed sensations in experiential terms, or what Rylance calls a first-person mode of address, pivot instead towards a "third-person perspective" that "arrogates a vocabulary and address so chilly and alien to the person whose experience are being described that he or she [could] barely recognize what occurred as his or her own."[18]

By re-describing subjectivity in terms of the somatic material underlying sensation, rather than our conscious experience of sensations, physiology formulated a body that appears entirely

[17] Rick Rylance, *Victorian Psychology and British Culture, 1850-1880* (New York: Oxford, 2000), 56-57.
[18] Rylance, *Psychology*, 168

impersonal in relation to the self seated within it. This physiological conception of the human body acts something like a supplement in the later years of the Victorian era that enticed novelists to think about the nervous system as an abstraction common to large groups of people. Liberal theorists in the second half of the century that take the physiological nervous system as the basis for crowd management signal the coming-apart of disciplinary individuality as a way of internalizing norms and rendering populations as so many self-governing individuals. Instead of thinking about crowds as a mode of behavior that belongs to those sections of the population deemed incapable of liberal self-government, the current of thought I have been outlining here takes the internal organization of crowds as a model for society generally—an organization that traces itself back to the automatic functioning of the body, or the abstract somatic mechanism underlying individual difference.

The body's universalism not only formed the ground for the rise of crowd management as a means of government, but was also calibrated within the planetary matrix of contemporaneous species sciences, especially as its more scientific clinical practice effectively discredited what Daston calls the "heterodox inquiries" of phrenology and physiognomy. At the same time that physiologists posited an abstract biological body common to the human species, this possibility of species universalism was undercut by racial anthropologists who sought to explain cultural differences between races by mapping out global humanity into different stages of evolutionary development. Although polygenesis, or the evolutionary hypothesis that different races essentially comprised different species, had been effectively discredited as a theory of evolution by the 1880s, monogenesis's theory of a single point of origin in Africa for the entire human species nevertheless allowed early anthropologists to locate colonial populations at more primitive stages of evolution than their European colonizers. As George Stocking makes clear,

the anthropology of race may have held the stamp of scientific validity in its popular circulation, but it was widely opposed by evolutionary scientists, chiefly over "the incompatibility of the typological assumptions of classical physical anthropologists to Darwinism." Phrenology and physiognomy, which located character in typological features on the surface of the body, allowed anthropologists to distinguish races "on the basis of anatomical and physiological characteristics, and most especially 'the form of the cranium.'"[19] The varying levels of significance accorded to race by different scientific disciplines boiled down to a question of which sciences of the body each discipline tended to espouse. Sarah Winter argues that whereas "both physiognomy and phrenology lent themselves to later projects in anthropology, criminology, and eugenics to categorize human facial types by race," species science by contrast rested on the influential physiology spearheaded by Carpenter, Lewes, and Spencer that largely supplanted explanations of character based on facial type. In Darwin's 1872 *The Expression of Emotions in Man and Animals*, the coherence of humanity as a single species becomes visible in the time lag physiologists posited between sensation and perception—in the preconscious moments when the body acts out "a repertoire of automatic and habitual reflex actions affiliated with animal expressions and thus resulting from natural selection." By "making [expression] a phenomenon produced by the underlying action of muscles and nerves," Darwin makes the body and its semiotic uses constitute what Winter calls "universal biological signs."[20] His "strongest case…for the unity of the human species" comes "through the universality of expression" that

[19] George W. Stocking, Jr., *Victorian Anthropology* (New York: Free Press, 1987), 249-250
[20] Sarah Winter, "Darwin's Saussure: Biosemiotics and Race in *Expression*," *Representations* 107 (Summer 2009), 131, 134-5, 146.

arises from a body whose nervous system and muscles act without the control of consciousness on instincts common to the entire species.[21]

When Deep Time Takes the Body

Haggard's 1885 *King Solomon's Mines* engages this species universalism by locating characters' affect and actions in the preconscious stages of the body's automated cognition, the micro-timescale in which the individual discovers in itself its basis in the human species. The novel sends a band of British explorers into an ancient African civilization preserved from contact with the modern world, where the explorers find themselves trapped within the geological record found in the novel's eponymous mines. By setting this encounter between modern Europeans and supposedly primitive African civilization literally against the backdrop of deep evolutionary time, the novel tests the species universalism proposed by evolutionary scientists against anthropological differences of race. The affective resonance and coordinated bodily movement that takes place across racial differences arise in the preconscious moments when the body acts not on the volition of an individuated self, but on behalf of instinct.

In taking this universalized body as the basis for character in his fiction, however, Haggard was not attempting to level the racial hierarchies of colonialism. Rather, the shared physiological basis for affect and cognition allows Haggard to ascribe empirical differences among races to what he regards as deformations of culture in African nations—the very justification John Stuart Mill advances for the "negative liberty" that made it the obligation of western nations to govern others to ensue their freedom from authoritarian rulers and primitive

[21] Winter, "Darwin's"., 132. See also George Romanes' *Mental Evolution in Man* (1893) and Chauncey Wright's *Evolution of Self-Consciousness* (1873) for influential examples of how an understanding of the body, either through clinical physiology or first-person consciousness, gets mediated through the circuit of species sciences as its categories of sense experience and instinctual-affective responses require reference to the primitive past of the human race.

patrilinealism. This anthropological inflection to Haggard's writing is especially clear in the way his novel experiments with time. By locating difference races at different stages of evolutionary development, Victorian anthropologists transformed "the present" from a point in time to something more like the overlap of a thick set of cultural timescales nested within the longer timeline of human evolution. The effect is a kind of deep time in the present when understood as a shared moment in the natural history of the species, as Haggard's explorers discover when they find themselves in a civilization whose language is to modern Zulu what Chaucerian English is to theirs.

Georg Lukács's *The Historical Novel* casts the British novel as a means of imagining community, a synthesis of individuality and collectivity built out of "people whose whole psychology belongs to the same level of historical development and is a product of the same social-historical ensemble." Putting to one side Lukács's sense that British historical fiction written during the Victorian era didn't quite meet this standard, I want to think instead about Victorian racial anthropology and the problem it poses for Lukács's model of social synthesis. If anthropologists sought to explain racial difference by locating different races at varying stages of evolutionary development, then as a result they would place strict limitations on who could be incorporated into a community built on the shared psychology produced by a common historical moment. Late-Victorian fiction such as Haggard's that takes up the problem of racial divides, ostensibly unbridgeable within the terms of civil society, achieves some form of synthesis precisely by thinking non-historically, by drawing on emergent timescales drawn from the natural sciences that exercise a different aggregating force from the temporalities of cultural history.

According to Lukács's argument, as history becomes a mass experience—as political and social upheavals become more frequent and palpable to "the mass of the population"—the lives of individuals come to be understood as historically conditioned by events on the national and international stage, aggregating those masses into nations and classes. Historical consciousness allows for communal synthesis among individuals all embodying the psychic structures of the same historical moment. The historical novel, then, is the form that derives a specific template of individuality from a given set of historical conditions, and depicts that individual acting at critical turning points in the past to bring about the historical conditions of his own development. Benedict Anderson's *Imagined Communities* pushes this line of thinking further. In order for what he calls the "sociological organism," or the collective form of life that inhabits the mass events of history, to take on a specifically national shape, individuals have to be able not so much to participate directly in the events of history as Lukács suggests, but to identify with events they do not consciously participate in. This becomes possible through a new structure of awareness that emerges alongside novels whose plots make us imagine a "meanwhile," a mediated awareness of mass communities doing different but related things all at once. Where Lukács argues that cultural history provides a back-story that explains the dialectical development of nations and classes, Anderson suggests that we imaginatively inhabit the nation through moments of conscious perception that we understand as simultaneous to the actions of the larger population we belong to.

Cultural history and conscious perception: fictional worlds in the late Victorian era extend their temporal scales further in both directions to figure out what kind of community can form out of the timeline of natural history, as opposed to national. As Wai Chee Dimock has pointed out, "as a unit of time, the nation tends to work as a pair of evidentiary shutters, blocking

out all those phenomena that do not fit into its intervals." Haggard plunges his explorers into the deep time of Victorian geology found within the eponymous mines, but he pairs this ponderous timescale with compressed moments of emergency time that elicit action from the body before characters have time for conscious thought. If Lukács shows how the emergence of historical consciousness at the beginning of the nineteenth century was a defining influence on contemporary literary form, it seems that a similar argument is available surrounding the co-emergence in the second half of the century of the deep evolutionary time of the species and the micro-timescale, or the milliseconds in which the body acts instinctually, autonomous of the conscious mind.

In Haggard's novel we encounter a proliferation of timescales large and small that raise the problem of how to inhabit them without losing the distinction between self and species, European and African. When one of the explorers, Good, is injured in battle, he survives only because a Kukuana woman tends to him as he sleeps for eighteen hours, such that "when at last he woke, she had to be carried away—her limbs were so stiff that she could not move them" (199). Haggard is relentless in organizing time into scales inhospitable to bodies, temporally elongating even the familiar posture of sitting to the point at which habituated uses of the body are no longer suited to the world they are supposed to inhabit. Unlike the comfort of British society where the explorers came from, the African wilds do not adapt themselves to human needs; even time itself seems unfriendly to the body. Pre-figuring the appearance in the novel of geological time, a timescale manifestly not designed with humanity in mind, Haggard takes act of sitting and stretches it out over temporal intervals that render it almost intolerable to the human body.

History itself, as a reified abstraction, actually makes an appearance within the novel, visualized as a synthetic timescale of human construction. Having stumbled upon the ruins of the earliest human civilization, a band of British explorers enter a cave where their attention is arrested by a design carved on a stalactite by an ancient laborer. Calculating the rock's rate of growth since that carving, they see the entire span of human culture inscribed within the geological record, represented as mere inches within columns of living rock that "arched away a hundred feet above our head" (211).

> Cut on one of these pillars we discovered a rude likeness of a mummy, by the head of which sat what appeared to be one of the Egyptian gods…This work of art was executed at about the natural height…namely, about five feet from the ground; yet at the time that we saw it, which *must* have been nearly three thousand years after the date of the execution of the drawing, the column was only eight feet high, and was still in the process of formation, which gives a rate of growth of a foot to a thousand years, or an inch and a fraction to a century. (212)

Within the matrix of deep time conceptualized by nineteenth-century geology, the history of human culture is dramatically minimized in relation to the timescales that shape the planet and the species. As the illustration of the Egyptian god suggests, the products of human culture that appear to transcend time—higher-order concepts such as divinity—are rendered transient and contingent within this larger timescale.

As scholars in the humanities begin to confront the aggregated effects of human life on the planetary ecosystem, new temporal scales have been installed in our understanding of the Victorian era. Beginning in the late eighteenth century, natural philosophers found evidence in layers of rock that the earth had formed over tens of thousands of years under the pressures of

natural forces that operated uniformly across the planet.[22] Over the course of the nineteenth century, scientists' estimate of that temporal scale rapidly expanded from thousands to millions of years. At the same time, as we have more recently become aware, the industrial practices of coal-burning that developed across Europe and North America made carbon emission and its effects on the temperature of air and water the defining features of the geological record for centuries to come, threatening mass extinction of many species of life including our own. The conditions that define our planet as hospitable to life take place at such massive scales of time and space that they can be apprehended only through technologies of visualization and efforts of abstract thought, never through the sensory capacity of the body. Climate, the aggregate of weather and atmospheres over long periods of time across large regions of the planet, is precisely what individuals cannot perceive in the weather that forms the immediate context for their lives. Climate is the much larger context that determines and explains the weather events we observe without being reducible to an account, even a far-reaching one, of such events. Events that take place at the temporal and spatial scales of the planet are of a different order from what counts as an event to individuals.[23] One could live one's entire life without ever encountering a significant event in the history of climate.

Or, more accurately, we all unwittingly live within and contribute to ongoing events that take place over stretches of time too large for them to be legible as events at the scale of conscious perception. As Dipesh Chakrabarty has pointed out, we "cannot ever experience ourselves as a geophysical force—though we now *know* that this is one of the modes of our

[22] See, for example, Noah Heringman's recent "Deep Time at the Dawn of the Anthropocene," *Representations* 129, no. 1 (Winter 2015): 56-85.

[23] The scalar shift from the local to the planetary, as Mark McGurl points out, entails not merely a change in perspective: "In stark contrast to the scale-free nature of fractal patterning, a change in scale often matters greatly—much as it does, for instance, in the sciences of biology and engineering, which have had reason to notice that things cannot be scaled dramatically up or down without also dramatically changing their design." See McGurl, "The Posthuman Comedy," *Critical Inquiry* 38, no. 3 (Spring 2012), 540.

collective existence…a form of collective existence that has no ontological dimension" (12-3). In the era of Anthropogenic climate change, then, we have to understand ourselves in two places at once—both in our familiar sphere of conscious agency, but also within the planetary scales that aggregate the agency of the species. In recent years, literary critics have proposed the Victorian novel as a form that addresses this paradox that such pervasive forces shaping human life cannot be rendered within the terms of human experience.[24] These scales are inhabited by two different bodies: one that is individuated, conscious, and experiential (an "I" or a "we"); and another that is massified, instinctual, and available only as an abstraction (an "it").

King Solomon's Mines, it seems, cannot experiment with non-human timescales without questioning the assumption that the individual ("I" or "we") is the basic unit of human life. The novel is thick with temporalities that take hold of the body in ways that threaten the equation of that body with a particular self. The instincts and pre-conscious impulses that emerge from compressed moments in time give us glimpses of bodies that belong neither to individuated selves nor to a national culture, but rather to the species-body that comprises Englishman and African alike. The temporalities in which instinct takes over not only disrupt the thoughts and feelings acquired from culture and consciousness, but also point us to the larger scale of deep time in which the human species takes shape. As that timescale becomes palpable as the organizing force within the narrative, it supplants more familiar narrative temporalities that attribute action to national sensibility and individuated character.

The hundreds of millions of years posited by Victorian geologists start to matter more to the events of the novel than temporalities of human making. When the explorers are sealed in a

[24] See Taylor, "The Novel as Climate Model: Realism and Greenhouse Effect in *Bleak House*" *NOVEL: A Forum on Fiction* 46, no. 1 (Spring 2013): 1-25.

cave within the mines and left for dead, they find themselves trapped in an alien timescale hostile to the very modes of perception through which individuals inhabit the world:

> I can give no adequate description of the horrors of the night which followed….you can have no idea what a vivid and tangible thing perfect silence really is. On the surface of the earth there is always some sound or motion…but here there was none…We were separated by a long tunnel and five feet of rock even from the awful chamber of the dead; and the dead make no noise...We were cut off from all echoes of the world—we were as already dead. (230)

Within this "living rock," the explorers are stripped of human temporalities and plunged into a timescale whose only events do not register on the sensorium, as they take place over thousands if not millions of years (229). The timescales that structure humans lives and experience break down as night and day collapse into "densest night," and the explorers strike matches to see their watches keeping a kind of time that no longer means anything to them.

Haggard ends up personifying the indifference to human life implied by the lifetime of rocks, transposing geological time's implicit contempt for human suffering into active forces in the text. The faces of "the silent ones," giant stone statues guarding the entrance to the mines, are marked by the "inhuman cruelty" of those "who could yet watch the sufferings of humanity…without suffering themselves" (208). Bearing striking resemblance to what Mark McGurl calls the "utter indifference to life we find in the geological and cosmic records," this inhuman face is mirrored in the figure of Gagool, the ancient witch who provides the guiding force behind the cruelties of Twala, the Kukuana tyrant.[25] Breaking apart the sentimental attachments among lovers and families through the mass killings she orchestrates, Gagool practices on humanity the cruelty born of indifference found in the timescales within the mines.

[25] McGurl, "Posthuman," 541.

Self-professedly older than the earliest human civilization but younger than the mountains themselves, Gagool marks the evolutionary cusp at which human life diverged from apes. Her "wizened, monkey-like figure….crept on all fours…reveal[ing] a most extraordinary and weird countenance. It was (apparently) that of a woman of great age, so shrunken in size it was no larger than that of a year-old child…the whole countenance might have been taken for that of a sun-dried corpse" (121). Unlike the similarly deathless Ayesha from Haggard's other novels whose life can be superimposed onto the history of human civilization, Gagool's age can only be charted in terms of rocks. Her life measures out the evolutionary timeline of the species against the backdrop of geological time, visualizing for us the biological life animating our species-body.

Although the critical tendency has been to read Gagool as a separate species of human, a kind of polygenetic projection of racial difference, that reading cannot account for the way Gagool functions in the text as the point around collectives assemble, combining African and European alike. By incorporating the traces of both an ape and a corpse, Gagool embodies the hard limit of what can be considered human. Whereas Ayesha's age seems to increase her sexual allure, the humanity Gagool models is a distinctly animal one—life stripped of culture and the higher orders of consciousness associated with particular lives. In her ceremonial role in the Kukuana court, Gagool calls out to the "vast concourse of living men" assembled, "*What is the lot of man born of woman?*" (130-1).

> Back came the answer rolling out from every throat in that vast company: "*Death!*"…the song was taken up by company after company, till the whole armed multitude were singing, and I could no longer follow the words, except in so far as they appeared to represent various phases of human passions, fears, and joys.

Hailing large numbers of people at the level of biological life, Gagool dissolves particularity into a mass body that moves, thinks, and feels as one. The British explorers, positioned at least partially outside this ceremony as anthropological observers, find that their cultural alienation from the scene does not exempt them or insulate them from the version of humanity it expresses. Despite the barriers of language and custom, their bodies affectively resonate with the elemental "passions, fears, and joys" that arise from this species-life. This resonance across the boundaries of race, nation, and body materializes itself as a "heaving mass of struggling, stabbing humanity" in the battles that follow (178). Statistical figures and fractions are transformed from bodiless abstractions into units invested with sentience and cognition. The night before the fighting commences, Quatermain reflects, as "these thousands slept their healthy sleep, tomorrow they, and many others with them, ourselves perhaps among them, would be stiffening in the cold; their wives would be widows, their children fatherless, and their place know them no more for ever. Only the old moon would shine serenely on…the wide earth would take its happy rest, even as it did aeons before these were, and will do aeons after they have been forgotten" (160). From the perspective of a planetary timescale, human mortality follows a stochastic logic that makes any particular life precarious and interchangeable at the level of large numbers.

Instantaneous moments of time, almost too fast to be perceived, disrupt the temporality of conscious perception in this novel and instead unleash the body's instinctual behavior. The plot is continually shaped by actions that never would have happened "if we had had time to think of it," as Quatermain, the narrator, frequently reflects (179). The actions that arise from these compressed points of time cut against both the cultural hardwiring engrained in habit and the individuated features of character lodged in consciousness and self-reflection. Indeed, self-reflection in this novel tends to reveal a discontinuous self, unable to incorporate the actions and

affects of the preconscious body into a single psychological identity. Quatermain, for instance, tells us in no uncertain terms that, "as those who read this history will probably long ago have gathered, I am, to be honest, a bit of a coward" (180). Yet "at this moment," he remarks, "a savage desire to kill and spare not… sprang up in my brain like mushrooms in the dark" (181). "All in an instant," he adds, I "began to wonder if my face looked like…the serried ranks of warriors behind us." Within the temporality of the *punctum*, the British explorers lose the ability to distinguish themselves from the African race they find themselves among. In those moments, the pre-conscious body acts not on behalf of the individual self bound to it, but rather as part of "the multitude" and "the assembled thousands" who are galvanized into action even when the individuals composing those masses "had not yet realized [what] had been enacted" (118, 120).

Jameson argues that the multitude represents the asymptotic limit of what nineteenth-century fiction can represent, and points to war as a paradigm for this "unimaginable collective totality": "the blooming, buzzing confusion of scene from which as yet no formalizable actantial categories have emerged" (Jameson 2009: 1547). Sure enough, when civil war comes to the Kukuana nation, the actions of the mass body populating the field of battle exceed the narrative's representational limits. "With a rush like the rush of the sea," the armies converge on each other: "What followed immediately on this it is out of my power to tell. All I can remember is a wild, yet ordered rushing, that seemed to shake the ground; a sudden change of front and forming up on the part of the regiment against which the charge was directed; then an awful shock" (181). The narrator's first-person point of view vanishes into the coordinated motions and sensations of the mass body he has become part of. Although, true to character, Quatermain has positioned himself well back in the ranks, the "awful shock" of the two armies meeting is not confined to

the front-line soldiers whose bodies actually meet but rather rattles the undifferentiated flesh of the entire army.

This mass body—what we might call a zone of collective embodiment—flickers into view within the novel's compressed rubrics of time, and deterritorializes the racial division between Britons and Africans that, to be sure, continues to operate at the level of consciousness. In one instance, when a young Kukuana woman has been condemned to death by the tribe's tyrant, an involuntary tic of pity courses through the assembled masses, despite the Kukuana people's duty to obey their ruler and the explorers' conscious decision not to interfere. Before Good can suppress his own twitch, "with all a woman's quickness, the doomed girl interpreted what was passing in his mind, and with a sudden movement flung herself before him" (147). In that moment when the impulse of Good's body escapes control of his conscious self, a set of immediate affective relations springs up between the two bodies that exceeds the limited possibilities of interracial sympathy generally available under Victorian colonialism. Audrey Jaffe's *Scenes of Sympathy* attests that Victorian sympathy, when directed across racial boundaries, did not produce any meaningful social coherence, so much as solipsistically transform racialized collectives into something like a psychological selfie of the sympathetic observer. Indeed, Patrick Brantlinger has shown that representations of "racially marked outsiders" are "meant to repel rather than to evoke sympathy," such that systems of sympathetic identification actually serve to reinforce rather than bridge racial divides (140). Although Good and the Kukuana woman, Foulata, require a translator to communicate elsewhere in the novel, the coordination of their respective bodily twitches instantly communicates meaning without the mediating cognitive step of sympathetically imagining themselves, as selves, in one another's place, as in a Smithian scene of sympathy. Within this pre-conscious timescale, the relationality

among bodies resembles nothing so much as the ripple of effect across a popular body Gustave Le Bon and Gabriel Tarde identify with the revolutionary threat haunting late-nineteenth-century Europe.

The Time of Mass Violence

It is all very well to locate the leveling effects of the species exclusively at scales of space and time that are perhaps too conveniently unavailable to our senses and, often, comprehension: so long as Africa is the place where culture and conscious thought are rolled back to show the substratum of biological life, then the old racial hierarchies are, for all intents and purposes, upheld.[26] The opposition of European culture versus the primitive lack of culture hovers in the wings of Haggard's novel, waiting to be re-imposed when the explorers return to the man-made temporalities of England. The same logic that strips the explorers of their personal and cultural characteristics just as quickly restores those characteristics when they return to England. By inverting the presumption animating eighteenth-century captivity narratives and Robinson Crusoe tales—that an individual abstracted from English culture could reproduce that culture around him or her as though from an internal source—*King Solomon's Mines* shows that outside the objective contexts of England, English subjects lose their dispositions within the timescales of the species body. By the same token, when Haggard sends his stranded explorers home, the synchronization of bodies within a mass body is emphatically replaced as the novel switches to an epistolary mode at the end, establishing more mediated relations between individuals through a postal network that dramatizes the spatial and temporal distance between particular bodies. The

[26] See Shital Pravinchandra, "One Species, Same Difference? Postcolonial Critique and the Concept of Life," *New Literary History* 47, no. 1 (Winter 2016): 27-48 which shows how a turn to the life sciences within literary studies masks the differential distribution of vulnerability across the species.

timetables of the railway and shipping routes thus restore Britishness, the horizon posited by Anderson in *Imagined Communities*, to the explorers who had gone native in their own bodies.

Victorian networks of transportation, as Wolfgang Schivelbusch has argued, produced a standardized time that aggregated new collectives on the imaginary grid of simultaneity, in much the same way that Anderson identified communities that emerged alongside multi-plot novels that coaxed readers into imagining their own lives as part of the simultaneous activity of a larger, national population.[27] Whereas Schivelbusch and Anderson both emphasize the ability of the novel to make us think about actions synchronized with others in the "meanwhile," Haggard concludes his novel through the medium of letters sent through transport networks seemingly for the opposite reason. The standardization of Victorian time can register not only the simultaneity of actions but also their *non*-simultaneity: the time lag between the sending and the receipt of a letter, between two bodies as distinct poles of communication and emotional interaction. No longer the zone of embodiment in which impulses and affect course through the undifferentiated flesh of the mass, the final pages of *King Solomon's Mines* filter out a small group of distinct individuals whose unique characteristics are somewhat heavy-handedly emphasized at the novel's close. The man-made temporalities of modern transportation thus sub-divide and differentiate the species-body that earlier became palpable when the novel attuned us instead to the natural temporalities of geological time and the physiological body.

We might think of this opposition between culturally produced time and natural time as the difference between the globe and the planet, as it has emerged in discussions of the turn to planetary consciousness. When Gayatri Spivak "propose[s] the planet to overwrite the globe," she defines globalization as "the imposition of the same system of exchange everywhere…

[27] See Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the Nineteenth Century* (California, 2014) and Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 2006).

something that resembles that abstract ball covered in latitudes and longitudes, cut by virtual lines….no one lives there; and we think we that we can aim to control globality" (338). The globe is an abstract projection of the communication networks and systems of exchange that render the territory they cover and the populations they aggregate legible in terms of nation and culture. Conversely, as recent attention to anthropogenic climate change has made clear, the planetary turn dissolves the opposition between nature and culture. Not only is the planet composed of zones such as climate that cannot be reduced to a set of national and international spaces, but it is measured by scales at which human culture becomes a natural force. Both synchronically across the earth's surface and diachronically across the span of deep time, planetary humanity wields an irreducible agency. Whereas the globe is comprised spatially of nations and temporally of their distinct cultural histories, the planet is a set of systems that take place over geographic regions and timescales that cannot be contained within the borders or historical narratives of the nation. In place of cultural history, Bruno Latour has advanced a "geostory" in which human culture and natural forces are no longer described as ontologically distinct, but rather as a single set of "entangled agents" that act on one another and collectively on the planet (14). Whereas the globe substitutes the abstract grids of human making for the messy geological and biological attributes of the natural earth, the planet entangles human and natural agency, best illustrated by the example of climate change in which humanity has taken on a geological force and the defining features of nature itself have become the products of human activity.

As the conclusion to *King Solomon's Mines* goes to show, nature and culture were not always so inextricably entangled prior to the advent of the climate concept in the second half of the twentieth century: the tendency of geological time to transform individuals into a species is

easily reversed when the novelist re-imposes social time on his narrative. There is, however, a nuclear heritage to the climate concept that allows us to see the availability of planetary consciousness well before widespread awareness of anthropogenic climate change.[28] Prior to the time when discussions of climate change began taking place, the interplay of sovereignty disputes and cultural hostilities among nations produced a threat that far exceeded the violence of one nation targeting the population of another. The potential for nuclear war to transfigure the conditions for biological life across the face of the earth reads like catastrophist narratives of late-Victorian fiction that imaginatively assembled a planetary population united by their common vulnerability to an invisible but omnipresent risk.[29] Unlike the strictly natural agency of the Victorian volcano or earthquake, however, the risk of nuclear war originates in national conflicts. Much like climate change, the nuclear threat ends up jumping from the dimension of the globe to the dimension of the planet by posing a threat to the very possibility of biological life that renders the differences between nations and individuals meaningless.

In Richard Klein's idiom, nuclear bombs and climate change both present threats to "the whole of organized life," such that we can only imagine the fatal consequences through fiction since there would be no subject position available from which to perceive the post-human earth directly. Or, as Srinivas Aravamudan suggests, under the umbrella of nuclear war and climate change, we have to understand our own lives and historical moment "from some future standpoint that could very well be a vantage point beyond human existence" (8). This reconceptualization of the present "inexorably begins to reverse the Enlightenment" in the sense that planetary life might be speeding to an abrupt end that "alerts us to the recalcitrance of the

[28] See the 2013 special issue of *Diacritics* devoted to the topic of climate change through the lens of nuclear criticism. Both climate and the nuclear bomb offer us conceptual models in which the destructive power of human culture takes on planetary proportions.
[29] See Daly's "The Volcanic Disaster Narrative: From Pleasure Garden to Canvas, Page, and Stage," *Victorian Studies* 53, no. 2 (Winter 2011): 255-285.

planetary system as an antecendent object the underlies the post-Copernican subject" (9). The aggregated actions and collective vulnerability of planetary life, to which individuated consciousness comes only belatedly, dramatically revises the Enlightenment's promise of autonomous subjectivity. Just as the power of rational deliberation and conscious self-control vanishes from Haggard's novel when his explorers discover the uncanny double life of their bodies at the scale of the species, the vulnerability of human life that brings the planetary into focus brings with it an antecedent determinism in which the individual's consciousness is always belated in relation to the mass movements of the planetary body targeted by the bomb. The threat of mass violence against generalized life figures in literature not as a source of transformative disruption—bomb-plot narratives are almost always unsuccessful in bringing about their social goals—but rather, counter intuitively, as a condition immanent to the everyday. Government policy increasingly took this constant, underlying risk as its object, a form of biopolitics that constrains the rights of individual in order to protect life at the level of large numbers.[30] To inhabit the Victorian atmosphere of risk, in other words, was to lose one's individuality in the mass body that emerged in relation to the threat against that body—the safeguards put in place by police and legislative measures were safeguards not of individuals but rather of the collective. The catastrophist story drawn from Victorian geology is thus transformed by the bomb plot novel—rather than a speculative future event that would completely obliterate the planetary conditions for human life, the risk of violence either directed at or emanating from massified human life allows us not only to imagine human life at the planetary scale, but also to understand how the everyday modes of individual life are shaped by and nested within a planetary mass that emerges in relation to an omnipresent risk of mass violence.

[30] Roberto Esposito, *Immunitas: The Protection and Negation of Life*, trans. Zakiya Hanafi (Cambridge: Polity, 2011), 55.

Synchronization and *The Secret Agent*

Conrad's *The Secret Agent* tells the story of an anarchist plot to bomb Greenwich Observatory in an effort to destroy the standardized time-keeping that underwrites international social order. Conrad seizes on an 1894 real-life attempt to bomb the observatory and, in narrating a speculative version of the events surrounding the failure, uses the immanent threat of mass violence to make visible large-scale configurations of human life. The plot originates with the diplomat-spy Vladimir who, on behalf of a pan-European aristocratic cabal, persuades Verloc, the eponymous "secret agent," that the British anarchist network must be pushed to some extravagant display of violence in order to galvanize Britain's propertied classes into stricter controls on popular freedom. Verloc obtains the explosives from the flamboyant bomb-maker known as "the Professor," whose pathological desire for autonomous individuality prompts him to walk about with a suicide bomb under his coat so that he might destroy himself before allowing his body to fall under the control of either the police or the mass behavior of modern life. Ultimately, the bomb's sole victim is Stevie, the cognitively deficient young man tasked with setting the bomb at the observatory.

In what follows, I show how time in this novel is visualized operating on and through the material body, synchronizing action, thought, and feeling with the mass behavior of the planetary population whose lives are standardized by the superimposition of the Greenwich meridian onto the globe. *The Secret Agent* shows us not only the synthetic time of human manufacture in the observatory—what we might identify as a technology of globalization—but also the way time is materialized in the biology of bodies, the chaos of urban life, and even compressed moments too small for human consciousness or sensation to narrate them. This entanglement of human and natural temporalities brings into view the way all individual activity is synchronized and

massified in the dimension of planetary time. Stevie's mental deficiencies model for us the way we have to revise our understanding of consciousness, volition, and self-control in light of a body whose feelings and habituated actions originate not in the mind but almost entirely from the determinations of mass behavior.

Greenwich Observatory becomes the terrorists' target as it is perhaps the one thing "the whole civilised world has heard of…even the boot-blacks in the basement of Charing Cross Station know something of it" (26). As the universal object of a collective consciousness, time is the abstraction in relation to which all human actions take place—the means of generating the larger, encompassing abstraction of the planetary. The trains that heralded, as Schivelbusch explains, the standardization of national and international time put the railway-station boot-blacks in a particularly convenient spot to watch time become visible as a means of coordinating large numbers of bodies across space.[31] If standardized time brings together "all the inhabitants of the immense town, the population of the whole country, and even the teeming millions struggling upon the planet," then the ubiquity of time in this novel serves to contextualize its every scene within those "teeming millions" (71). *The Secret Agent*, unlike *King Solomon's Mines*, draws no distinction between human and nonhuman time. It is, rather, the interchangeability of temporal markers—whether the ticking of a clock over the shoulder of a cabinet minister, or the blood dripping from a murder victim "with a sound of ticking growing fast and furious like the pulse of an insane clock" (194)—that points all the more to the reality of the temporal dimension they all demarcate and refer to.

Whereas *King Solomon's Mines* works to abstract time from the human experience of it by positing temporal scales outside our perceptual range, Conrad inverts this formulation to

[31] See Schivelbusch, *Railway* who suggests that public transportation, in standardizing perceptions of time and space, aggregated new communities on the imaginary grid of simultaneity.

suggest that the power that accrues to time is so continually marked as to dictate the movements of masses of people. Not a scene goes by in the novel that isn't haunted by some version of the "ghostly mechanical tick" that registers the presence of time, that grid on which even solitary thoughts and feelings are plotted as part of Bagehot's massed combination of mankind (101). The noise of a crowded street quickly organizes itself into the rhythmic "rattle and jingle" of a loose window in a cab that measures out the time that otherwise "seemed to stand still" (115). Strides, blinks, and heartbeats, to name but a few, embody the temporal unfolding of the narrative. Even scenes of utter solitude nevertheless register the presence of standardized temporal increments: "All was so still without and within that the lonely ticking of the clock on the landing stole into the room as if for the sake of company" (131). The company, indeed, of the "teeming millions" whose lives are coordinated in relation to that ticking as well. As time materializes itself in and around the human body, it establishes a double life of the body that belongs at once to the scene of individual awareness and to the synchronized masses that the novel visualizes through the eyes of "the Professor."

So determined is this "Professor" never to be made subject to the power of the law or any superior physical force that he carries a suicide bomb strapped to his chest wherever he goes with his hand on the detonator, "the supreme guarantee of his sinister freedom" (61). In an effort "to destroy public faith in legality" and the social abstractions that threaten to impinge on individuality, he turned to bomb-making in his youth due to "the subconscious conviction that the framework of an established social order cannot be effectually shattered except by some form of collective or individual violence" (60). The mass public he targets is not, according to his idea, made up of proper individuals. "Their character is built on conventional morality. It leans on the social order. Mine stands free from everything artificial. They are bound in all sorts of

conventions. They depend on life, which, in this connection, is a historical fact surrounded by all sorts of restrains and considerations, a complex organised fact open to attack at every point" (51). From this perspective, imaginatively situating himself outside any form of sociality or collectivity, human life appears something like a plane of massification.

> Lost in the crowd, miserable and undersized…he was in a long, straight street, peopled by a mere fraction of an immense multitude; but all round him, on and on, even to the limits of the horizon hidden by the enormous piles of bricks, he felt the mass of mankind mighty in its numbers. They swarmed numerous like locusts, industrious like ants, thoughtless like a natural force, pushing on blind and orderly and absorbed. (61)

Having multiplied the "mere fraction" out into the immense whole, the novel grafts a scalar awareness onto the senses of its reader to show us the very thing the Professor fears—that the lives of individuals might scale up to a human mass that moves, thinks, and feels in its own right. It goes without saying that this "mass of mankind" is more than the sum of its individual constituents, who are most certainly subject to sentiment and capable of logic or terror. How does membership in this projection of humanity change what it means to be a body?

Although the novel demonstrates that there is no human experience whether social or solitary outside temporality, Conrad makes it equally clear that time is not confined to the scales available to human consciousness. The bomb, which fails to reach the observatory, succeeds in blowing up only the developmentally challenged young man, Stevie, who was tasked with setting it. Its explosion testifies to scales of time in this novel that the individuated body cannot inhabit or perceive. Although the police inspector investigating the explosion finds it nearly "impossible to believe that a human body could have reached that state of disintegration without passing through the pangs of inconceivable agony," he nevertheless recognizes that the explosion

"must have been as swift as a flash of lightning," such "that man, whoever he was, had died instantaneously" (65). The moment of explosion constitutes a rubric of time so compressed that its events unfold too quickly for perception to keep up. The sensory capacity of Stevie's body is eradicated by "the shattering violence of destruction which had made of that body a heap of nameless fragments" before sensation itself can occur. Much like the *punctum* of emergency time in Haggard's novel, this imperceptibly small timescale is inhabited not by individuals, whose modes of perception cannot inhabit or narrate it, but rather by the mass of humanity at which that "shattering violence" is directed. Although the explosion, as Vladimir proposed it, is intended to hew to the logic of what Alain Badiou calls *the event*—a moment of rupture or conversion that originates outside ontology to alter the category of what is possible—the bombing does not ultimately succeed in fulfilling this narrative function. It is not merely that the bomb fails to destroy the observatory as planned, but rather that the disintegration of Stevie's body dramatizes the category of *the everyday*, which Michael Sayeau has recently identified in Conrad's fiction as a narrative logic opposed to the event. Far from transcending the ontology of the everyday, the bombing reveals that a global population whose collective political future is shaped by the omnipresent risk of mass violence is invisibly, imperceptibly immanent to the everyday life of the individual.

Within this timescale, the self, as a perceptive center relative to surrounding stimuli, evaporates into so much disarticulated flesh.[32] Stevie's remains appear to the Chief Inspector as "a sort of mound—a heap of rags, scorched and bloodstained, half concealing what might have been an accumulation of raw material for a cannibal feast. It required considerable firmness of

[32] Georges Canguilhem identifies the nineteenth century with the biologization of selfhood, such that the human organism cannot be understood apart from its milieu, "a *center* relative to the surrounding forces that are no longer, relative to it, anything but signals and stimuli" (26). See Canguilhem, "The Living and Its Milieu," *Grey Room* 3 (Spring 2001).

mind not to recoil before that sight" (64). For the purposes of argument, I would like to consider this disassembled body not as the victim of the Professor's unstable bomb, but rather as the mode in which humanity inhabits this timescale. Whether exploded by a bomb or subsumed within the mass of humanity that the bomb is directed at, human flesh can no longer be said to comprise an individuated body. Stevie becomes a quantity of formless flesh that, paradoxically, belongs both to the mass and to the individual it comprises. Throughout the novel, Stevie serves as an illustration that, even in life, the flesh that eventually gets piled on the table before Inspector Heat can hold the form of individuality only imperfectly. In a novel composed, as Conrad writes, of "all imbeciles," Stevie's idiocy seems to speak for humanity more generally.[33] He proves constitutionally unable to be "the useful member of the family" his sister anxiously tries to make him, and is sent out to work as an errand boy instead, where he is routinely picked up and escorted home by policemen in the street in a continuing circuit (43). Stevie embodies a Malthusian problem of population, a human surplus that cannot be contained within the household that produces him, nor metabolized by the wider economy.

Stevie is the image of humanity in the age of mass culture, weak-minded and incomplete when isolated and easily swayed in his actions by those around him. Given his lack of mental completeness as an individual and his failure to secure any kind of stable social position for himself, it should come as no surprise that it is through Stevie's eyes that we discover the inadequacy of individualist explanations of human behavior within the milieu of planetary humanity. At the sight of London's impoverished masses, Stevie's "tenderness to all pain and all misery…reache[s] the point of a bizarre longing to take them with him to bed. And that, he knew, was impossible…it was, as it were, a symbolic longing" born of his childhood experiences

[33] *The Collected Letters of Joseph Conrad, Volume III*, ed. Frederick Karl and Laurence Davies (Cambridge 1983), 372-3.

of fear and misery when "his sister Winnie used to come along and carry him off to bed with her, as into a heaven of consoling peace" (123). Care of the self, as the key to the emotional well being of individuals, is somewhat tragically and somewhat comically shown here to be insufficient as a means of administering to the needs of the mass. Stevie's "faithful memory of sensations" associates bed with "the supreme remedy" to human suffering, "with the only disadvantage being of application on a large scale." This "memory of sensation" here draws on the associationist model of mind, construing the individual as the product of associations arising from a Benthamite sensationalism. As Conrad makes plain, this associationist logic does not scale up from individuals to populations who swarm "blind and orderly and absorbed, impervious to sentiment, to logic, to terror too perhaps."

To inhabit a body in either *The Secret Agent* or *King Solomon's Mines*, then, is to be taken hold of, deformed, and massified by scales of time that do not register on the individual as consciously held perceptions. Rather, in both novels, the effect of what John Plotz might call "experiments in antiexperiential abstraction" is a kind of disfiguration of the body as the habituated dispositions of individuality are displaced by massifying temporalities.[34] Whether Stevie's literal dismemberment or the contortions of bodies gripped by impersonal impulses in Haggard's novel, a range of disfigurations registers the presence of imperceptible scales of time operating within fictional worlds at the end of the Victorian era. By supplanting the temporality of conscious perception and the timeline of individual development as the organizing narrative structures, Haggard and Conrad leverage experimental timescales as a technology for turning interiority inside out, transforming character into currents of affect and exteriorized dispositions that embed individuals within global configurations of life they are part of without knowing it.

[34] John Plotz, "Speculative Naturalism and the Problem of Scale: Richard Jefferies's *After London*, after Darwin," *MLQ* 76, no. 1 (March 2015), 53.

Making those configurations visible requires drawing a connection between the determinism attributed to mass behavior, and mechanistic explanations of selfhood advanced by nineteenth-century physiology—two ostensibly unrelated ways in which Victorian discourse detached action from individuated consciousness. Whether through the reflexive actions of a nervous system that receives and responds to sensations before consciousness has time to exercise itself, or through the collective trends and rates at the level of large numbers, the Victorian body was animated and aggregated by forces imperceptible to first-person experience that usurped the power of thinking, feeling, and acting from the individual. Across a diverse cultural landscape—from sociology to sexuality, from liberalism to literary genres—the body in the second half of the century came to serve as a tipping point between individuality and massification. Those instinctual tendencies of the body that exceeded or disrupted the social persona or "self" lodged in that body were pushed off onto the species-body to which the individuated body belonged.[35] Conversely, the ideas and feelings that appeared to liberal theorists of government to belong more to the masses than to the individual were attributed to the lower orders of pre-conscious cognition taking place in the body that betrayed the mind to the popular affect of crowds.[36]

The widespread uptake of physiological science, in detaching action from volition and conscious intent, allowed the impersonal, unfamiliar, and often repulsive or alien behaviors of mass humanity to be materialized in individual bodies despite their potential incongruity with the selves housed there. Although historians of science generally agree that Victorian physiologists posited an individuated body defined and determined by its sensory and chemical interaction

[35] Frederickson, *The Ploy of Instinct: Victorian Sciences of Nature and Sexuality in Liberal Governance* (New York: Fordham, 2014), 6-7 and Nancy Armstrong, "When Gender Meets Sexuality," in *The Cambridge Companion to the Victorian Novel*, ed. Deirdre David (Cambridge, 2012).
[36] Nicholas Daly, *Literature, Technology, and Modernity, 1860-2000* (Cambridge, 2010).

with a particular environment, that same body came to serve as an abstraction common to the entire species. Overdetermined as the apparatus of affect subject to what Jameson calls "global waves of generalized sensations" that is also somehow identical to the conscious individual it produces, the physiological body introduces a repertoire of precarity into the continuous identity of selfhood.[37] The shared flesh of the human animal holds the form of individuality only tenuously and imperfectly, always under threat from a much more immediate set of affective ties among bodies than the mediated intersubjectivity that forms between conscious selves. What Haggard and Conrad both illustrate is the way the determinism of global frameworks gets expressed through the involuntary operations of the embodied unconscious: in *King Solomon's Mines*, the instincts and inherited reflexes developed by the species over the course of deep, evolutionary time manifest themselves in the "unconscious cerebration" of the body; likewise, in *The Secret Agent*, the habits and automated routines of Conrad's characters serve to particularize the mindless behavior of mass culture within the narratives of individual lives.

[37]Fredric Jameson, "War and Representation," *PMLA* 124, no. 5 (2009), 28.

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