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# THE FORCE OF HABIT:

# RHETORIC, REPETITION, AND IDENTITY FROM DARWIN TO DRUGS

A Thesis in

English

by

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# Abstract

The trope of habit in Western culture has had an important tradition as a pedagogical strategy, a way of accounting for human behavior, and even as an explanation for the workings of natural and physical laws. However, in its contemporary guise, habit has become what some scholars call a culturally dead metaphor: that is, while the word is still used, it conveys only a shade of its former cultural resonance and weight. This project attempts to invigorate the concept of habit by turning to nineteenth and early twentieth century discourses of evolutionary biology and psychology (and the responses to these discourses), in which the concept of habit was both more vital and more richly nuanced. Chapter One introduces the "problem" of habit, including its relation to the rhetorical concept of *ethos*, and, by extension, ethics. Chapter Two examines how Darwin treated habit as one of the forces that ordered the dizzying complexity of life; it also considers how Darwin himself predicts (via the concept of habit) some contemporary habits of reading Darwin, and provides Samuel Butler's response to Darwin as a counterexample of ways in which Darwin's work might be read. Chapter Three considers William James's important use of habit and attends particularly to certain self-experiments by which James attempted to negotiate the force of habit. Chapter Four examines the ways in which habit became appropriated in John Broadus Watson's behaviorism as a means to attempt control over experimental subjects and then consumers. Finally, Chapter Five demonstrates the material effects of the changing definition of the habitual user of drugs: from morphinomaniac to habitué to addict.

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# Chapter 1

# Introduction

> We are habits, nothing but habits:
> the habit of saying 'I'.
> -Gilles Deleuze, *Empiricism and Subjectivity*

Through force of habit, Laura Sewall lost her sight. Then, through force of habit, she gained it back again.

Well, maybe it wasn't as dramatic as all that. When Sewall, a self-described "ecopsychologist," was a teenager, she spent some time in Kenya teaching algebra to schoolchildren. Unnerved by her reception (intense, giggly interest) and the various anxieties attendant on removing oneself to a foreign culture, Sewall retreated, literally and metaphorically, behind a wall of hair. "As a decent defense, I neurotically picked at the split ends of my hair, thinking and thinking and hiding in the self-contained world of my psyche" (2). Such inattentively repeated behavior (staring at the ends of her hair from a close distance) eventually led to a bad case of near-sightedness, which remained as a physical imprint of her first experience in Africa, and worsened as she got older.

While myopia for many in our culture is an annoying but minor fact of life, Sewall found wearing glasses to be a severe hindrance to her daily interactions with the world. She could have just remediated the problem with contact lenses, of course—but nonetheless, having heard about a program for retraining the eyes called the Bates Method, she moved to Los Angeles to study vision improvement with a teacher. To make a long story short, it worked. Through continual drilling: attention exercises, "near-far swings" where one looks into the distance and then close up, mental visualizations, and eye-balancing exercises, Sewall's physical sight eventually cleared: "Soon fabulous shapes and vibrant colors signaled to me, edges were sharp all the time, and whole stories revealed themselves on street corners" (3). The structure of Sewall's description suggests that a subjective transformation had taken place alongside the physical one—rather than positing a grammatical subject actively seeing the world, things in the world instead acted upon Sewall: "vibrant colors *signaled to me*"; "stories *revealed* themselves." While to cure Sewall's myopia required the repetition of overt acts of will (i.e., the eye-training exercises), a more complex dimension of will is at work here as well: one which creates a heightened subjective attentiveness and receptivity to the sensual world. Sewall writes, "My imagination became strong and clear and I was able to picture whatever I wanted to see. I became more receptive to seeing the whole of what lay before my eyes" (3).

Though Sewall does not name it as such, her description of her experience characterizes the Janus-faced operations of habit in humans, which in the most basic sense can be described as the conscious or unconscious (or, to put it a different way, the passively or actively willed) repetition of behaviors that leads to a transformation of the self. In Sewall's case—both in losing her vision, then regaining it—repeated behaviors

fostered a change in her physical being. The first type of change—the loss of vision—is arguably a retreat from the world, a passive sedimentation, a hardening. The second is practically its opposite: a deliberate, rigorous training and disciplining of the body that increased Sewall's capacity to respond to the world, both physically and otherwise—what Aristotle and other educators in ancient Greece called *hexis*.

Sewall's newfound ability to see, her subsequent trained attentiveness and receptiveness to the world, subsequently fostered an even more startling transformation—one that called the very idea of an individual self into question. Back in Africa, this time for research, Sewall's fascination with the shifting light on the savannah grasses induced what she calls (via the mystic tradition) a "unitive experience" (8), after which her visual perception became a practice for profound, intense connection: "My eyes continually stretched to and rested on the distant blue horizon, continually scanning, looking and watching, as if busy in the act of gathering beauty—although it seemed to seep through every pore and sometimes simply slice through me. I had surrendered myself" (8). An extreme attentiveness to self-discipline somewhat ironically enabled a mode of being where the self no longer mattered.

I use Sewall's experience as a singular, though not unique example of the connection between habit (in both its sedimentary-passive and disciplinary-active functions) and ethics. Of course, the connection between habit and ethics no longer resonates with the cultural force that it has had in times past: in ancient Greece, or, more recently, in the mid-nineteenth century, where habit was discussed in the same breath as life, and even the universe. Charles Sanders Peirce, the founder of pragmatism,

considered habit to be akin to universal "law" (though perhaps, given the nature of habit, universal *tendency* would be more appropriate).

Some have suggested that habit, a concept that has gone in and out of vogue since the time of the ancient Greeks, currently retains only traces of its force as an explainer of human behavior. Joseph Thomas, for instance, argues that, "The discourse of habit is one of the great, albeit largely unacknowledged, cultural legacies of Western civilization; insofar as it survives today, it does so as a dead metaphor" (8). Of course, Thomas isn't suggesting that the word has lost all usefulness, or that it has become archaic. But it no longer carries the force or cultural weight that it once had. "Habit" for Thomas has connotations of the banal, the mundane, the everyday—those idiosyncratic behaviors we all have, some of them more fixed than others—a bad habit of chewing one's fingernails, of putting socks on before pants, of holding one's head to the side when one asks a question. To be called "a creature of habit" has slightly unflattering connotations. So habit describes these quotidian behaviors well enough, but these behaviors aren't typically described as what produces our sense of self-ness, what the nineteenth-century theorist of habit Maine de Biran called the *sentiment du moi*, the "feeling of being me."

But despite its apparent status as a dead metaphor, habit seems lately to have gained in cultural purchase or resonances, a fact that can be empirically verified simply by browsing the self-help sections at any mega-bookstore chain. Stephen R. Covey's best-selling *The Seven Habits of Highly Successful People* (1990) and its various spin-offs (there's an *Eighth Habit* now, along with a newer book by Covey's son called *The Seven Habits of Highly Successful Teens*) has spawned a small industry of books that promise success of various sorts through the rigorous disciplining of one's own habits

and modes of being. Conversely, a host of other books promise ways to help one get rid of habits that block one from a more productive and successful life: habits like procrastination, smoking, overeating, and "underachievement," to name just a few. Both types of habit-oriented books serve as manuals for attending to and disciplining one's individual self in response to the cultural expectations of so-called "late capitalism" and the globalized consumer economy. Consumers are invited to consider how their own entrenched behaviors and modes of being—i.e., their habits—might be modified so as to fit more smoothly into the functioning of power. Judging by the bestseller status of many of these books, the people who buy these manuals for modulating and controlling habit do so eagerly, even joyfully—a fact that continues to puzzle liberal critics of the consumer economy.

## Narratives of the Self

Despite the massive amount of work done on subjectivity in the last thirty years, a persistent and stubborn confusion still seems to linger around questions of subjectivity and the Self. It was (and still is) practically a critical commonplace in discussions of subjectivity and identity to ratify the disappearance of the so-called "Cartesian self," that sadly misbegotten entity once caricatured by Nikolas Rose as "The self: coherent, bounded, individualized, intentional, the locus of thought, action, and belief, the origin of its own actions, the beneficiary of a unique biography" (Rose 3). Goodbye to all *that*, we proclaimed (a bit too loudly, maybe…for, despite protestations to the contrary, this version of the self still seems to evoke some measure of nostalgia for its solidity and *presence*). Perhaps owing to the same metaphysical logic that produced such an entity in

the first place, the assumption seemed to be that if the Cartesian self no longer served, then what remained must be its opposite—namely, a self that is formless, empty, inscribed and constructed by social or cultural forces. In short, what tended to get put into place was an equally caricatured entity: the *lack* of the Cartesian self.

Here's the basic problem: the theory of the Cartesian self clearly costs a lot, in the Nietzschean sense; and academics (especially in the humanities), being left-leaning, can't or don't want to buy into this model because it basically justifies the rampant environmental destruction, colonialism, racism, pre-emptive war, outlandishly large vehicles, urban sprawl, and pretty much every other contemporary social ill that one could name. However, the socially constructed model of the self is clearly unsatisfying as well, because it doesn't make sense in terms of what people *feel* to be true. Marshall Alcorn (in an essay that is itself attempting to find a different way to talk about the self) suggests that the socially constructed model of selves doesn't work because it doesn't account for this stable feeling of being a self that continually haunts us:

> History shapes selves, but we must understand the psychological principles that explain how social activity gives particular shapes to various discrete self-structures. It is a mistake to imagine a particular self as a simple, random, and constantly changing collection of texts shaped by historical forces. A particular self is not an infinitely changing collection of voices housed within a biological organism. It is a relatively stable *organization* of voices. We need not adopt the various models of self-organization advocated by psychoanalysis, but as rhetoricians, we should acknowledge that the self has a relatively stable inner organization. The

> different modes of the self vary enormously according to time and place, but each self seems to have a distinctive character—a characteristic 'self-structure'—that gives it a distinct quality. (12)

What Alcorn basically longs for here, or what he's talking about in terms of a stable self-organization, a self that apparently remains stable over time, is *habit*. Habit and habituation provides a way to think about a Self that does not act entirely on its own behest, free from the action of any external social, cultural, or economic forces. When we talk in my freshman composition classes about the rhetorical force of marketing or advertising, for example, students will inevitably say, "but I buy these things because I like them," invoking personal freedom of choice; when, if one takes Foucault seriously, it's apparent that the market itself produces that choice. And the way, of course, that marketers learn consumer choices is by studying consumer behavior—that is, their habits (see Chapter Three). Habituation is a powerful force—as Samuel Butler puts it with his usual pith, "an action, if not positively harmful, tends to be repeated."

As in the case with Alcorn's longing for a way to talk about the Self as a stable organization, there have been other forlorn, disparate nudges at habit. In her 1992 essay "Epidemics of the Will," for instance, Eve Kosofsky Sedgwick mentions habit briefly, as the "othered tradition of addiction." In "The Matter of Habit," (1989) Charles Camic wonders when and why the concept of habit, vital to such nineteenth-century social thinkers like Max Weber and Emil Durkheim, disappeared from sociology. Marion Joan Francoz ponders the material character of habit in her 1999 essay "Habit as Memory Incarnate." *Something* seems to be there, something useful. It seems to be what we're talking about, what we're looking for.

## The Sedimentary and the Active

Habit is at once entirely singular and entirely impersonal. However, the usual contemporary understanding of habit is that a Self exists prior to the formation of habits, a point of view promulgated, for instance, by Rosalind Gabin in her discussion of Aristotle's concept of *ethos* and its relationship to habit. Gabin writes, "Habits, once formed, stick to the individual, become ingrained, and help to form the individual's character" (124). For Gabin, habit is something that "sticks to" the individual, the grammatical structure of her sentence suggesting that the individual pre-exists the habits. However, this is not the case. Habit happens *to* us, even as through a complicated feedback loop with the world, we develop other habits. Habit is at the same time singular, ubiquitous, and mundane. Habit is the force by which a self is configured; each self is a singular and absolutely unique entanglement of the biological (genetic) and the early and late conditioning shaped by interactions with others and the world: interactions like acquiring speech patterns and the effects of language; gendered and raced forms of identification, or learning to be in the world as a demographic; learning the relation to various types of authority; and all the other possible affective relations that interacting both with other people and with the material world might produce. Thus habit is also not something that arises by force of a subject's will; rather, habit is something that happens *to* one. One learns, and learns well—so well, in fact, that these unique configurations of learned and repeated behavior seem to take on the solidity and stability of real matter. They can be unified into something called a Self or an "I," a hardening through unification and identification. However, the benefit of thinking about the self **not** as a

unified object that pre-exists experience, but as a collection of habits is that we can think about the self as something *plastic*; certainly something that resists change, but something that *can* be changed, perhaps through a transformation of the modes of relation to the world.

This potential for transformation is where the other aspect of habit comes in, what might best be called *hexis*, following Aristotle's use of the term in both the *Rhetoric* and the *Nicomachean Ethics*. As I described in the case of Laura Sewall's vision above, *hexis*, literally "a learned manner" is also based on repeated behavior, though it is different from what we might call "sedimentary habit" because it also involves will and agency in ways that are absent from sedimentary habit. Aristotle marks three ways that virtue, and by extension, identity is formed: through natural capacity, training by others (teaching), and finally, *hexis*, or active, deliberate attempts on our part to become virtuous. An individual is born with certain natural capacities and incapacities, a point also upheld by Cicero and Isocrates in reference to teaching. That is, one's natural capacities tend definitively toward certain directions, and have a recalcitrance that makes them difficult to change either through teaching or through an active exercise of will. No matter how many times one might attempt to "teach" a stone to fall upwards by throwing it in the air, Aristotle says, it will stubbornly maintain its natural inclination to fall downward. The particular configuration with which something enters the world forms a kind of bedrock that must be accounted for in any attempts to shape the character of that being. Virtues, then, can only be formed insofar as a being's natural capacity will allow: "Therefore the virtues come to be present neither by nature nor contrary to nature, but in

us who are of such a nature as to take them on, and to be brought to completion in them by means of habit" (II: 1, p 22).

Thus, for Aristotle, while habits can shape a being to an extent, they are always themselves shaped and directed by the constraints of that being's natural inclinations. In other words, habit development is an immanent process—one is always working within a specific set of parameters, limits, and openings, and great attention is required to feel for the blockages and also the places that "give," the openings where a transformation might occur (another version of the sense of habit as inhabitation that I discussed earlier). One's natural capacities might incline one to become a harpist or a house builder; but practice and the development of habits are required to fulfill the potential of that natural capacity. Likewise, the creation of virtues requires practice and the development of habits as well. Though, given certain natural capacities, one may be more inclined more toward certain virtues than others, virtues only exist through practice. That is, virtue is developed in a person only through the practice of virtuous acts. While one may have a potential or inclination toward the practice of certain virtues, virtue does not exist before its performance. A man is considered courageous because he continually performs courageous acts, not because he says he is courageous, or has the look of courage about him. Virtue IS a virtuous act, Aristotle says; it does not exist prior to its performance. Thus, as also demonstrated by contemporary theorists of performativity like Judith Butler, identity is not something that exists outside of practices, which, through repetition, lead to the formation of habits. Identity and habit are therefore co-created in a recursive process, in which one continually directs and shapes the other.

## Habit, Ethics, and *Ethos*

The sense in which habit is related to ethics can be gleaned by considering its etymology in *ethos*. In a 1968 article often cited by contemporary scholars studying *ethos*, Thomas Corts points out a discrepancy in the use of the term *ethos*. In Greek there are two terms that, when transliterated into English, both end up looking like *ethos*: ἔθος and ἦθος. ἔθος, says Corts, means "custom or habit," as compared to ἦθος, which means "custom, disposition, character, delineation of character, bearing" (Liddell & Scott 480. 766, qutd. in Corts 201). ἦθος is the term used by Aristotle that most resembles our use of *ethos* today, that is, as the character of the speaker or writer in a rhetorical situation. ἦθος is a somewhat loaded term, because it has moral connotations—or, as Corts puts it, an "oughtness": "However, for rhetoric ἦθος has connotations of right and wrong, virtue and vice, moral 'oughtness'" (Corts 202).

*Ethos* thus begins to take on a distinctly political tone, given Corts' delineation and interpretation of its differing etymologies and definitions. While nothing in the Greek definition of the term explicitly links "custom or habit" with moral neutrality, Corts' judgment of ἔθος as morally neutral (and, implicitly, thus equivalent to a negative definition) sticks. Corts' interpretation of the distinction between ἔθος and ἦθος was reinforced by George Yoos's 1978 article "A Revision of the Concept of Ethical Appeal" written in the interest of (he writes) "offering a redefinition of ethical appeal grounded in moral terms" (41), in response to his perception that "it is the morally neutral concept ἔθος that seems to interest rhetorical scholars and theorists most today" (41). Such a turn of events, Yoos claimed, "limits our understanding of rhetorical events" (41).

Yoos argues that the apparent favoring of the morally neutral term *εθος* over the more overtly moral *ηθος* was responsible for leading scholars of rhetoric down a dangerous moral path. While most would consider Aristotle to be the forebear of using *ethos* as a proof and thus calling attention to the importance of disposition and character in oratorical rhetoric, Yoos faults Aristotle with being the one that destabilized the ground on which *ethos* rests. Alhough, as Yoos acknowledges, Aristotle did stress the importance of the moral qualities of *ηθος* in the *Rhetoric*, the problem is that *ηθος* could be faked—that is, a rhetor could falsely represent her "real" character. Hence, Yoos argues, "Aristotle's rhetoric invites pretense and dissembling. His emphasis on feigned *ethos* raises serious moral questions about his notion of ethical appeal. It also raises questions about the propriety of calling appeals ethical when referring to the non-moral attributes of appeals" (42). What most troubles Yoos about Aristotle's use of *ethos* as a proof is that *ethos* can be persuasive to an audience in and of itself; it does not need to refer back to a controlling (and stable) *logos* for its ability to convince an audience: "[Aristotle] makes no pretense that having good reasons is always the strongest means of persuasion" (45). Yoos's distinction between the potentially deceptive powers of *ethos* as an appeal and the ostensibly more stable, truth-based *logos* echoes Plato's uneasiness over the power of rhetoric because of its unaccountability or grounding in truth. Yoos's Platonic anxiety over the idea that *ethos* or the character of the speaker itself can be persuasive apart from any connection to reason reveals his implicit belief that there is some authentic version of the self that should not be dissembled or hidden, but fully revealed through speech. As such, Yoos implicitly valorizes Quintilian's ideal of "the

good man speaking well," where the "good man" does not simply *act* like a good man for the sake of winning over his audience, but actually *is*, authentically, a good man.

Though Corts cites Liddell's Greek-English Lexicon as the source for his distinction between ηθος and εθος, a quick perusal of the definition of ηθος reveals that the definitions of the two versions of *ethos* aren't quite as distinct as Corts makes them out to be. In fact, the first definition provided in the entry for ηθος is "an accustomed place, haunts and abodes for animals." Definitions with overtly moral implications, like "moral character," only appear halfway through the entry, underneath and above other definitions, including "custom" or "usage." While ηθος is perhaps a more elaborate definition of the concept of *ethos*, it seems that it doesn't have quite the distance from the definition of *ethos* as custom or habit that Corts and Yoos suggest after all.

The past two decades have revealed a renewed critical interest in the concept of *ethos*, as the intense general academic interest in questions of subjectivity and identity have sparked a general reconsideration of any concept having to do with self or its presentation. And *contra* Yoos, Corts, and others who are interested in preserving a true, authentic, stable self, more contemporary thinkers of *ethos*—including Susan Jarratt, Nedra Reynolds, Joanna Schmerz, Brad Vivian, and Michael Hyde (among many others)—are interested in *ethos* precisely for the ways in which it helps to call attention to the instability of this self. In the introduction to his collection *The Ethos of Rhetoric* (called "Rhetorically, We Dwell"), for instance, Hyde calls for a rethinking of the concept of *ethos* as something more than the credibility or the moral character of the speaker, which implies something that is "attached" to an already-existent entity, instead of something habitual, developed through practices: "Abiding by this more 'primordial'

meaning of the term, one can understand the phrase "the *ethos* of rhetoric" to refer to the way discourse is used to transform space and time into 'dwelling places" (*ethos*; pl. *ethea*) where people can deliberate about and "know together" (*con-scientia*) some matter of interest. Such dwelling places define the grounds, the abodes or habitats, where a person's ethics and moral character take form and develop" (xiii). Understanding *ethos* in this older sense, Hyde writes,

> directs one's attention to the 'architectural' function of the art: how, for example, its practice grants such *living room* to our lives that we might feel more *at home* with others and our surroundings. The *ethos* of rhetoric would have one appreciate how the *premises* and other materials of arguments are not only tools of logic but also mark out the *boundaries* and *domains* of thought that, depending on how their specific discourses are *designed* and *arranged*, may be particularly inviting and moving for some audience. The *ethos* of rhetoric makes use of our inventive and symbolic capacity to construct dwelling places that are stimulating and aesthetically, psychologically, socially, and perhaps theologically instructive. We *are* creatures who are destined to be caught up in the process of providing the openings of these places wherein good (and bad) things can happen. (xiii, emphasis in original)

Hyde's push to reconceptualize *ethos* suggests a move away from the rational or discursive elements of rhetoric to one that relies more on a haptic sense of space and of discourse. Hyde's (and some of the others whose essays appear in the book) definition of *ethos* highlights the concept of habit as *inhabitation*, which leads to a different

configuration of the relationship between ethics, habit and *ethos*. Whereas Corts and Yoos posit this relationship as counter-indicatory, Hyde's rethinking of *ethos* as a dwelling place gives us another way to imagine an ethics based on a careful, attentive repetition, an inhabitation of a space of thought, discourse, or knowledge.

To dwell in a place requires a keen attentiveness to the surroundings and their effects on one, one's affective relation to where they dwell. Such an attunement is only gained by attentive repetition. James once described habit as a way of making oneself feel at *home* in a place, like the way dogs trot around a new place, accustoming themselves through repetition (literally running in circles) to unfamiliar smells and new configurations of space. We learn, through repeated experience, how to interpret the creaking sound in the hall and the way the light tends to slant through the windows in late afternoon. Through repeated encounters with a new place (and one could extend this idea of the "dwelling" to any new experience or set of actions as well), one learns its contours, how it works, the sticking points and the places that attract one, thereby creating a sense of familiarity that eventually doesn't just "free up" one's attention for other things, as James described it, but actually creates a deeper level of attention, one that resonates in the body as well as in the consciousness. In a new place, one has not established a sense of where one fits in, so one has to *learn* new modes of relation through repeated engagement. It requires by necessity that one's attention remain engaged, that one remain open to the unfamiliarity and strangeness of this unfamiliar encounter.

To inhabit something is to create, in Deleuze and Guattari's parlance, an "assemblage." An assemblage can be created with machine, text, concept; and the function of the assemblage is transformation through habituation. Through a repeated

engagement with something that exists "outside" of ourselves (though that word is somewhat troubled as well—one only can see "inside outside" from a certain level), we become something Other, thereby calling the entire concept of self as the way we habitually think about it into question. In a sense, then, the ways in which we dwell, and our relationship to that—our connection to it and our consciousness of it—is always and already an ethical relation. But a way of inhabiting the world that we might code positively as "ethical" might require a more heightened attentiveness to the ways in which we dwell. Ethics is a responsiveness to life, an *inhabitation*, as it were—and the capacity for this responsiveness is created only through long repetition.

## Habit and the Common

Insofar as the multitude is neither an identity (like the people) nor uniform (like the masses), the internal differences of the multitude must discover *the common* that allows them to communicate and act together. The common we share, in fact, is not so much discovered as it is produced.
Michael Hardt & Antonio Negri, *Multitude*

A man running along the street trips and falls. Two little boys giggle. Their mother represses a snort, then feigns concern. The man, red-faced, gets up and brushes himself off, then continues on his way, more carefully this time.

In his essay on laughter and the comic, the nineteenth century French philosopher Henri Bergson famously defined habit as "something mechanical encrusted on something living" (23), a rigid automatism that imposes the demands of an individual subject or self onto a situation, such that the individual fails to respond to the dynamicism and continual flux of life itself. Bergson explains why the automatism suggested in the case of the falling man is *funny*:

> [I]t is not his sudden change in attitude that raises a laugh, but rather the

> involuntary element in this change—his clumsiness, in fact. Perhaps there was a stone in the road. He should have altered his pace or avoided the obstacle. Instead of that, through lack of elasticity, through absentmindedness and a kind of physical obstinacy, AS A RESULT, IN FACT, OF RIGIDITY OR MOMENTUM, the muscles continued to perform the same movement when the circumstances of the case called for something else. That is the reason of the man's fall, and also of the people's laughter. (9, emphasis in original)

What provokes laughter in this case is a form of absentmindedness or inattentiveness. While life produced certain specific realities unique to the situation (i.e., a sidewalk with a stone on it), the individual acted instead according to the dictates of habit, the memory of all the previous times he had traversed the sidewalk when there were no stones to trip him up.

While these different situations in time are clearly *similar* and hence might have been perceived by the individual as something that did not demand full attention, clearly the elements contrasted here by Bergson are attentiveness—*responsiveness*—and, conversely, a habit-driven way of being in the world. This contrast is marked by laughter, which Bergson characterizes as a function primarily of the social—that is, while an individual can laugh, of course, laughter generally requires a crowd: "However spontaneous it seems, laughter always implies a kind of secret freemasonry, or even complicity, with other laughers, real or imaginary" (9). Thus laughter is a social, intersubjective gesture, an asignifying force from a community of intelligences that acts upon an individual who has done something profoundly asocial, something that snubs or

rejects life in some way. In the case of the man who tripped and fell, the gap between what life called for and what the mechanical, habit-driven behavior of the offending individual produces calls forth laughter to bridge it.

The potential that one could be laughed at—always present in social situations—serves to keep the attention heightened: "By the fear which it inspires, [laughter] restrains eccentricity, keeps constantly awake and in mutual contact certain activities of a second order which might retire into their shell and go to sleep, and, in short, softens down whatever the surface of the social body may retain of mechanical inelasticity" (13). The automatism produced by habit, then, seems to be the natural tendency of human beings. In order to help the individual truly respond to life, rather than simply obeying the prompts of an interior, habit-driven set of commands, a cutting or interruption of this basic automatism is required. This cutting or interruption of habit thus allows *something else* to emerge, something that seems to be a more fitting response to the dynamic flux of life: what Bergson characterizes as the fully awakened human, "the wide-awake adaptability and pliableness of a human being" (10).

Though I began with the example of a single individual configured in different ways by the force of habit, habit is actually much more *common*. Habit is not owned by individuals, but configures them. It's difficult not to see habit as a force that is fundamental to life (as the title of Samuel Butler's *Life and Habit* suggests) and to all matter; but more precisely, what is interesting about habit (especially for the many people eager to reconceptualize subjectivity and identity) is habit's belonging-ness to both and neither the inside and outside. In its most basic form, habits are produced as a result of the interactions of some sort of the individual self with the world; like breathing (which

James equates literally to thinking) or eating, habit exists neither *inside* the individual, nor *outside*, but as a complicated intertwining of both. As suggested by John Broadus Watson's study of behavior, contemporary marketing formations like retail anthropology, and the characterization and treatment of those who habitually use drugs, the choices and decisions that seem to arise from *inside* oneself (like what type of shampoo to buy), actually are manifested, produced, and (one might argue) controlled externally, thus deeply confusing or complicating the question of subjective agency. The epigraph by Deleuze with which I opened this chapter ("We are habits, nothing but habits—the habit of saying 'I.'") thus perhaps takes on a more intense resonance. The "we" and the plural "habits" suggests that the ostensibly unified thing called "I" actually is comprised of a multiplicity of selves—the thing that we feel and recognize as a stable self can perhaps more accurately thought of as an intricately, finely knotted series of bundles that bind up the external and the internal. "We are habits, nothing but habits…" Elizabeth Grosz, along the same lines, imagines the subject as a Möbius strip in *Volatile Bodies*, a smooth ribbon-like figure that simultaneously reveals both its interior and exterior. While this image of the self complicates the easy idea of an autonomous interior bounded against the outside, Grosz's Möbius strip subject seems still a bit too smooth, however—whereas as selves, we seem much more like bundles of messy, knotted remnants; albeit messy, knotted remnants that are *plastic*, and hence subject to transformation.

## Interventions and Configurations

I can't help but dream about a kind of criticism that would try not to judge but to bring an oeuvre, a sentence, an idea to life; it would light fires, watch the grass grow, listen to the wind, and catch the sea foam in the breeze and scatter it. It would multiply not judgments but signs of existence; it would summon them, drag them from their sleep….It would bear the lightning of possible storms.
-Foucault, *Ethics and Subjectivity* (xx)

Given all the apparent ways that habit seems to resonate with our contemporary cultural and theoretical moment, then—the valuable tools that it provides for thinking about subjectivity, identity, and the ordering of the socius and life writ more broadly—the question naturally arises: "if habit's so great, then why is nobody talking about it?" This is the question that provides the impetus and exigency for my current project. I describe my project as a "rhetorical genealogy"—I trace the consistencies and resonances, as well as the rhetorical shifts and breaks in the concept of habit through four sites in the nineteenth and early twentieth centuries: through the work of Darwin, William James, John Broadus Watson, and the medical and (later) legal literature on the treatment of drug addiction.

For Darwin, habit is the force that orders the massive proliferation of life. Contrary to both popular codings of Darwinism as "survival of the fittest"—a warlike (coded masculine, of course) struggle to the death, or at least the wound—and also to appropriations of Darwin by neo-Darwinians like Richard Dawkins, who tend to reduce the complexity of Darwin's system to the action of a single agent (in Dawkins' case, the gene), my reading of Darwin highlights his sense of the irreducible complexity of what can only be called an ecological conception of the world, and the function that habit plays in providing patterns or order to that complexity.

For William James, habit is "ten times nature," a force that characterizes not only inorganic matter (an idea that James's contemporary Charles Peirce develops much more fully), but most especially the individual's interactions with the world. Habit in James is perhaps best characterized as a modulatable interface between self and world that can

both severely limit individual responsiveness and openness to life (a mode of being upon which he placed great value), but one that can also be directed toward a fuller immersion in the world. Finally, habit (and the self it creates) can also be radically hacked, as James discovered through his investigations into mysticism and the subjective effects of drugs like nitrous oxide, chloral, and mescal.

But somewhere in the nineteenth and early twentieth centuries, habit began to operate in different valences, more amenable to what Deleuze (via Foucault) characterizes as the shift from disciplinary to control society. This was marked by a rhetorical shift, one that was especially apparent in the discourses of behaviorist psychology and the treatment of and discourses on addiction. Of course, these new valences were not simply caused by the rhetorical shift; rather, the rhetorical elements operated in conjunction with new forms of economics (i.e., the shift from a production- to a consumption-based economy), colonial expansion, technological development, changes in legislation, etc. The final two chapters of my dissertation examine habit as it changed from a modulatable interface between self and world and the force that orders life to the pathological property of an already-constituted subject (as in the discourses on drugs) and as a visible site for scientific and economic control (as in John Broadus Watson's behaviorist discourse). If habit is now a "dead metaphor," as Thomas suggests, the changes undergone in the concept of habit as a result of this rhetorical shift are arguably what killed it, robbing it of its positive force and relegating it to the realm of the banal—even though, as will be clear in the last two chapters, the control-aspects of habit are still alive and well and producing material effects today.

I use these historical sites in particular as an instance of what Jeffrey Walker called "the usable past"—that is, far enough away to be different from our own stories, but not so far that it's totally alien. But more importantly, as I mentioned above, habit simply seemed to be more varied and lively at this time. These sites are not necessarily representative of all the ways that habit was thought about and discussed then (and continues to be thought about and used today); however, I hope to provide a series of "snapshots" of habit as it functioned in particular discourses, as well as some instances of the material effects that such discourse had or was bound up with. The method I attempted to use for reading was thus something like Samuel Butler's "pebble" method (described in Chapter One). I'd like to think that my method of reading performs the content of the work; therefore, if habituation (*hexis*) requires a finally grained attention, a repeated encounter with a specific set of practices or objects, then to read (by this, I also mean "write about") a text requires a habituation itself, a familiarization with the text that allows one to work within it, immanently—habituation to the text allows one to see the text's own consistencies and resonances, as well as its fault lines and discontinuities.

This brings me to my final point, about certain elements that haunt the dissertation: namely, seduction, fascination and mysticism. While in Bergson, the *negative* (i.e., potential laughter) is what keeps habit in check, there is also a more positive sense in which habit can be overcome: that is, through the positive force of seduction, a trope that arises again and again in the discourse on habit. The call of life, of the outside, seems to *draw one out*, as it were. Darwin was seduced by life itself, the "vegetative repetition" or what I call "organic refrains," the seductive power of which worked through Darwin's text on Samuel Butler who (contrarian to the end) instead

linked this vision to Lamarck. And, of course, drugs are a powerful seducer; both the opiates of the morphinomaniac-turned-habitué-turned-addict, and nitrous oxide for William James. It seems that when one deeply considers the force of habit; what it prevents us from seeing, the ways in which it limits and directs modes of relation to the world (writ large)—a fully attentive participation in life, as it were—one inevitably gets drawn into questions about what a fully attentive participation in life actually might look or feel like. The use of habituation (in the sense of *hexis*) to transform habits of inattention, after all, is the basis for many spiritual traditions, Zen Buddhism being the tradition that comes most obviously to mind. There is a deep connection between the practices and purposes of Zen (one wants to avoid the use of the term "goal") and a strain of thought that runs through other thinkers on habit, especially Charles Peirce, William James, Samuel Butler, and Henri Bergson. With this project, I hope to bring these connections (back) to life.

# Chapter 2

## Tropes of Habit, Tropes of Life: Organic Refrains, Biological Amnesia, and Darwinian Seductions

> Early man, roaming about in small bands through large and often empty spaces, was confronted by a preponderance of animals. Not all of these were necessarily hostile; most, in fact, were not dangerous to man. But many of them existed in enormous numbers. Whether it was herds of buffaloes or springboks, shoals of fish, or swarms of locusts, bees, or ants, their numbers rendered those of man insignificant.
>
> For the progeny of man is sparse, coming singly and taking a long time to arrive. The desire to be more, for the number of the people to whom one belongs to be larger, must always have been profound and urgent, and must, moreover, have been growing stronger all the time. Every occasion on which a pack formed must have strengthened the desire for a larger number of people.
>
> —Elias Canneti*, Crowds and Power* (107-108).

For Darwin, life always involves a crowd. And the most basic tendency of life, like crowds, is to *swarm*. Life in Darwin's work is characterized most fundamentally by a ceaseless proliferation, a repetition which creates a field of forces produced from within the system itself and immanent to it. Life experiences what Darwin calls a "geometrical ratio of increase," proliferating algorithmically: "There is no exception to the rule that every organic being naturally increases at so high a rate that, if not destroyed, the earth

would soon be covered by the progeny of a single pair" (53). Everywhere that life exists, a corresponding material movement, a vital *will*, presses ever outwards, filling every possible surface and depth on which it can gain a foothold: on rocks of the Arctic tundra, in deep sea vents, in the acidic guts of other creatures.

Yet for all its ceaseless proliferation, life is surprisingly orderly. Based on repetition, things tend to move in patterns: herds of buffalo, shoals of fish, the rhythmic dividing and multiplying of cells and the subsequent creation of hierarchies—organs, limbs, etc. Physiological structures echo across species in an organic refrain: bat's wing, monkey's hand, seal's flipper, wolf's paw, horse's hoof. And no wonder—Darwin locates the most elemental repetition, as it were, in the simplest structures: segments of worms and crustaceans and the whorls of certain simple leaves reproduce rapidly, vastly increasing the chances that difference might emerge. "An indefinite repetition of the same part or organ is the common characteristic…of all low or little-modified forms," Darwin writes; "Therefore we may readily believe that the unknown progenitor of the vertebrata possessed many vertebrae; the unknown progenitor of the articulata, many segments; and the unknown progenitor of flowering plants, many spiral whorls of leaves" (418). Life pushes up most insistently from the bottom, from the most humble structures, and the iteration of these humble structures form the basis for more complex ones:

> I presume that lowness here means that the several parts of the organization have been but little specialized for particular functions; and as long as the same part has to perform diversified work, we can perhaps see why it should remain variable, that is, why Natural Selection should not have preserved or rejected each little deviation of form so carefully as

> when the part has to serve for some one special purpose. In the same way that a knife which has to cut all sorts of things may be of almost any shape; whilst a tool for some particular purpose must be of some particular shape. (125)

Like tools, the more complex the organism, the less it tends to vary. A simple tool like a knife might be used for any number of operations: it can be used to chop vegetables, whittle wood, cut stray threads from a sweater, to make a spear when it is bound at the end of a long staff. By contrast, a large, complex, stationary tool like a lathe is comparatively more limited in its functions. Thus more complex organisms lose some of their vegetative flexibility and mobility as they become more specialized, i.e. more carefully and specifically adapted to their surroundings. More complex living beings become less plastic, able to operate only within a greatly narrowed range. One might say that these individuals become habit-bound—habit, along with physical structure (which in itself is a kind of habit, albeit more static), establishes a set of parameters for organic beings, suggesting the range of plasticity, the characteristic ways of life and subsequently the ability to adapt to changing conditions.

In this chapter I examine Darwin's concept of habit in more depth. Habit makes regular appearances in Darwin's work; but because there are bigger theoretical fish to fry, so to speak, little scholarly attention has been given to what ultimately is a humble but fundamental concept. However, since in Darwin one might argue that life itself is based on repetition, it is on the back of habit that Darwin constructs his theory of natural selection—therefore, it's because of its very ubiquity that habit proves to be important. Contrary to some contemporary appropriations of Darwin that assign causality to a single

agent, like the gene, Darwin's own work presents evidence of a generalized systemic complexity that cannot be reduced to or explained by any one cause. However, habit is one of the forces that orders this complexity. Darwin's use of habit teaches us several things: first, that habit is fundamental to life in its creation of order, both at the individual, the species, and the systemic or ecological levels. Second, habit also serves as the force that hides complexity or makes us forget it. In this chapter, I examine this double movement of habit, both in Darwin himself and in the way Darwin's own work gets read, readings that ironically fulfill Darwin's own predictions about habit. However, Darwin's work on sexual selection suggests that there might be other means by which to engage his texts: namely, via seduction and fascination.

## Systemic Complexity

Contrary to claims made by contemporary neo-Darwinians like Richard Dawkins, for Darwin the process of selection is clearly more than a strictly biological one. While it is tempting (and apparently in some cases irresistible) to conceive of selection as a one-to-one process that takes place strictly between the "fitness" of a living being and its environment, Darwin in the *Origin* and throughout his work continually argues against this conception, creating instead a much more holistic, what we might term an "ecological" conception of life: "the structure of every organic being is related, in the most essential yet often hidden manner, to that of *all other organic beings*, with which it comes into competition for food or residence, or from which it has to escape, or on which it preys. This is obvious in the structure of the teeth and talons of the tiger; and in that of the legs and claws of the parasite which clings to the hair on the tiger's body" (OS 127,

my emphasis). With this Darwin establishes a dynamic field of forces within which everything exists and out of which the forms, structures, and behaviors of organisms emerge. As such, the title of Darwin's most famous work is somewhat ironic, because the concepts within it throw the very idea of origins into question. We don't know what comes first, the structure of the parasite that clings to animal hair or the animal that it clings to. The habits that inhere in an organism (both in its form and its behavior) are not simply a product of that organism's will—rather, they emerge in response to the pressures placed on them by a myriad of other forces: meteorological patterns that affect food availability, the movement of foreign species into the organism's environment, viruses and other forces that infect the organism; rather, they inhere or are formed as a result of the organism's immersion and inextricable complicity in this field of forces. The very proliferation of life described by Darwin, the pulsing repetition and movement outward, creates an urgency of sorts, a field of forces immanent to the system. Because the forces arise from within the system, they engender a series of interactions, responses, habits, and mutual dependencies, a teeming complexity impossible to reduce to a single (or even several) causes.

In a section of the *Origin* describing "how complex and unexpected are the checks and relations between organic beings" (58) Darwin provides several examples of the dependencies and interactions between beings that appear initially to be remote from each other in the system. For instance, he writes, "In several parts of the world insects determine the existence of cattle" (59)—a rather striking assignment of causality. A species of fly in Paraguay lays its eggs in the navels of newborn cattle, and by doing so keeps the cattle in a tame or domesticated state. These "navel-frequenting flies" are the

prey of certain parasitic insects, which in turn are fed on by insectivorous birds. If the insectivorous birds that feed on the parasites would experience some unexpected decline, Darwin surmises, the parasitic insects would rapidly increase to the detriment of the navel-frequenting flies, causing the cattle and horses to become feral, which would alter the vegetation of the area, which would affect the insects, which would affect the birds, "and so on," Darwin writes, "in ever-increasing circles of complexity" (59). To take a more localized example, in his monograph on orchids Darwin describes what we might call the "distributed reproductive system" of the plants. The reproductive structures of the orchids, structured to look like various insects, reveal their complete dependence on their ability to lure insects in to pollinate the orchids, in a multi-species system of reproduction. By the same token, following a single strand in any living system inevitably reveals an entire complicated web of interactions that cannot be reduced to a single cause or single agent:

> [B]ut with organic beings we should bear in mind that the form of each depends on an infinitude of complex relations, namely on the variations which have arisen, these being due to causes far too intricate to be followed out—on the nature of the variations which have been preserved or selected, and this depends on the surrounding physical conditions, and in a still higher degree on the surrounding organisms with which each being has come into competition—and lastly, on inheritance (in itself a fluctuating element) from innumerable progenitors, all of which have had their forms determined through equally complex relations. (OS 107)

Thus, despite the title of his most renowned work, this passage suggests that assigning origins or causes to either species or the complex systems of life proves to be next to impossible. Not only are organisms that exist in the present bound up in "an infinitude of complex relations," the causes of which "are too intricate to be followed out," but also the *ancestors* of these organisms, having been subject to the same levels of complexity, are also equally different to assign causes to. In fact, if we extend Darwin's argument to its logical conclusion, we might see that the very idea of individuality gets called into question here. Though they may appear to be solid and individuated, living things are so dependent on their interactions with other living things—to say nothing of non-organic forces like geology, climate, political agendas, economics, and human socio-cultural systems, that identifying a trait, behavior, or physiological structure as solely the property of one organic being seems rather hopeless. To use the example discussed above, where might one locate the orchid's reproductive system, for instance? Is it contained within the body of the plant itself, or is it flying around stuck to a moth's feelers? Or both? Darwin suggests that it is not entirely locatable in either, but in the moving, living interactions of the two species within the context of all the other organic and non-organic factors in which the insect and the orchid exist.

## Organic Refrains

Rhythmic and repetitive, habit in its structure and function is very like a song: "As in repeating a well-known song, so in instincts, one action follows another by a sort of rhythm; if a person be interrupted in a song, or in repeating anything by rote, he is generally forced to go back to recover the habitual train of thought…" (OS6 206). Song

here is equated to rote, interestingly enough, an analogy given poignancy by Darwin's description later in life of his own loss of pleasure in music and poetry.

Habit shapes and solidifies things that are tendencies; thus, a living being might show an inclination toward one type of behavior or another, and this inclination will be developed into a full-blown behavior through repetition, creating a habit, and it can also be selected for (if one is talking about artificial selection, of pigeons for instance) in order to make the trait more marked in subsequent generations.

In the first edition of the *Origin*, Darwin remarks that "Habit also has a decided influence" (9) on the variability of domestic species, invoking Jean Baptiste de Lamarck's theory of "inheritance by acquired characteristics," in which Lamarck supposed that living beings, in response to changes in their environment, changed their habits, producing new structures adapted to the environmental changes that would then be passed on to their offspring. The theory of inheritance by acquired characteristics was much maligned during Lamarck's own time and has been ever since (though recent work done by Richard Steele and others suggests that it might be not so wrong after all). Darwin himself was always more of a Lamarckian than the champions of his theory of natural selection admitted or wanted to believe, though more contemporary neo-Darwinians and biographers argue that Darwin only clung to Lamarck's theory because he was unaware of Mendelian genetic mechanisms, rediscovered after Darwin's death in the early 1900s. Nonetheless, habit became if anything even more important to Darwin throughout his life—a close examination of the variorum edition of the *Origin* (which went through six editions) reveals that Darwin strengthened his Lamarckian ideas even as

he nominally distanced himself from them in order to distinguish his theory of natural selection.[1]

Selection in Darwin (and, by extension, the appearance and habits of living beings) is not simply an expression of a biological impulse or structure; rather, it is influenced by a complex of other factors as well, including current aesthetic tastes, as Darwin points out in the case of pigeons: "On the view here given of the important part which selection by man has played, it becomes at once obvious, how it is that our domestic races show adaptation in their structure or in their habits to man's wants or fancies" (OS6 28). In pigeons, as in all other organic beings, not just physiological structure, but also habits (and instincts) are equally considered to be subject to the effects of selection.

In her article on Darwin's theory of emotions, Elizabeth Wilson uses Karl Lorenz's claim in the preface to *Expression of the Emotions* that behavior and habits are structured and develop exactly like biological features, and can be used to distinguish between species just as well as biological or structural features as evidence that in Darwin, "evolution is not narrowly or primarily a biological process" (62). Against the "routine and widely circulated account" (62) of human emotion in *Expression of the Emotions*, i.e., that biological structures unilaterally dictate how humans emote, Wilson

[1] For instance, in Chapter VI ("Difficulties on Theory") of the sixth edition of the *Origin*, Darwin clearly uses the Lamarckian inheritance of acquired habit to explain how different species might have arisen: "As we sometimes see individuals following habits different from those proper to their species and to the other species of the same genus, we might expect that such individuals would occasionally give rise to new species, having anomalous habits, and with their structure either slightly or considerably modified from that of their type" (*OS*6 141). However, in the later chapter on instincts, Darwin reasserts his (unnamed) anti-Lamarckism: "But it would be a serious error to suppose that the greater number of instincts have been acquired by habit in one generation, and then transmitted by inheritance to succeeding generations" (OS6 206). Since Darwin mentions hive bees and ants in the following sentence, one might presume that he was acknowledging the difficult problem of neuter insects, which had been pointed to by proponents of divine creation as the examples that disproved the theory: because insects like worker bees and ants were sterile, it was seen as impossible to either pass on characteristics/habits acquired in one lifetime (as Lamarckian theory would have it) or for offspring to be naturally selected, since there were no offspring possible. However, Darwin argued that the selection took place on a hive or anthill level, the individual members of the hive being rather like the organs or cells of a larger functioning body.

argues that for Darwin, a complex of forces and not just biological ones propel evolution and development:

> [T]he impermeability of the biological realm to a wide range of mechanisms of inheritance, transmission, and transformation is a decidedly un-Darwinian presumption. Darwin's system of evolution specifies the ontological co-implication of animals, man, plants, rocks, and emotions. Each mode of materiality is built through its complicitous relations to the others, and heredity is governed by a heterogeneous set of forces. (65)

Thus the interconnectedness of organisms and other organic and non-organic pressures makes biology permeable to these forces. Wilson uses blushing as an example of the intersubjectivity of the actions of the direct nervous system. One blushes because one worries about how one appears to another; blushing is thus not simply a biological phenomenon but an emotional reaction that requires an assemblage. Likewise, in the breeding of domestic animals, a variety of other factors aside from the biological prevail, including the level of civilization of its inhabitants, land ownership, and other class factors; Darwin remarks that sheep and donkeys, being kept only by poor people on small lots, rarely display variations, while owners of nurseries with large stocks of plants can literally afford to have the numbers of living beings necessary to display a variation that might be selected. In any case, the fact that a living being's habits, along with the multitude of other non-biological factors, influence the adaptation and variability of species, reveals that selection is much more processual than static: the combination of

factors that influences selection is dizzying, and cannot be distilled down to one obvious cause.

## Biological Amnesia

Perhaps because the force of habit structures the way we *perceive* the world as much as how we *interact* with it, much of this complexity is almost irresistibly elided. Our stubborn perceptions of organic beings as positive, individuated, and the agents of their own actions continually obscures the complexities at work—a process of forgetfulness that Darwin accounted for as part of the system itself. In a monograph cumbrously titled *The Formation of Vegetable Mould Through the Action of Worms, With Observations on Their Habits*, Darwin reminds us that there are (in this case, literally subterranean) forces that work to shape what we see and take for granted: "When we view a wide, turf-covered expanse," he writes, "we should remember that its smoothness, on which so much of this beauty depends, is mainly due to all the inequalities having been slowly leveled by worms" (139).[2] This passage, coming as it does toward the end of his final published work, serves as something of a parting cautionary measure to be watchful—to "remember"—that there are forces at work in the formation of the landscape beyond human control or consciousness. But it's an echo of what Darwin attended to all along. In a passage in the first edition of the *Origin*, for example, he writes,

[2] In Darwin's Worms, Adam Phillips points out that what was visible was, for Darwin, the endpoint of a hidden process, a complex of forces at work that went on overlooked by most (because the eye is too habituated to see it): "The ground is as it is because something is happening under ground; what is visible is, as it were, the end of a story" (47).

> We *behold* the face of nature bright with gladness; we often *see* superabundance of food; *we do not see or we forget*, that the birds which are idly singing round us mostly live on insects or seeds, and are thus constantly destroying life; or *we forget* how largely these songsters, or their eggs, or their nestlings, are destroyed by birds and beasts of prey; *we do not always bear in mind*, that, though food may be now superabundant, it is not so at all seasons of each recurring year. (OS1 51-52, my emphasis)

The passage, calling attention as it does to seeing and forgetting, to human consciousness ("we do not see, or we forget"; "we do not always bear in mind") seems like an odd contradiction given that Darwin generally is not much of a humanist. Such an emphasis on consciousness can be found throughout the Origin, however: "*Unless it be thoroughly engrained in the mind*," Darwin writes in the Origin, "the whole economy of nature, with every fact on distribution, rarity, abundance, extinction, and variation will be dimly seen or quite misunderstood" (OS 51, my emphasis). "Dimly seen, or quite misunderstood"; "we do not see or we forget"; such an emphasis on consciousness, on rational understanding, on *seeing*, is somewhat surprising when one considers what small primacy Darwin places on the human in general, at least until *Descent of Man* (and the *Descent*, as evidenced by its outraged reception, did little to establish a special or unique place for humans in the complex systems of nature). However, these passages establish a rhetorical connection between habit, consciousness, attentiveness, and forgetfulness. To maintain a level of attention or consciousness sufficient to remain cognizant of the complexity of living systems requires, ironically, a training of the mind, a habit of a different sort than the semi-passive repetition of tendencies. Though Darwin does not

elaborate on what it would entail for the complexity of nature to be "thoroughly engrained on the mind," it implies a conscious effort of some sort, a disciplining of the attention.

Darwin marks forgetfulness of complexity as something inherent to living creatures, as almost a biological imperative. So despite his warnings in the *Origin* and elsewhere, it comes as little surprise that readings of Darwin tend to reveal a similar forgetfulness. The problem is that much of contemporary theoretical biology appears to suffer itself from a form of amnesia, the edifice of its assumptions constructed on the elision of a great deal of the text (i.e., Darwin's) from which it claims to draw much of its authority and justification. In his foreword to the second edition of Susan Oyama's *Ontogeny of Information* (a book that attempts to reinstate some of this complexity) Richard Lewontin argues that the reason that the study of genes and genetics has eclipsed the study of embryology or development because it's too difficult to think in terms of the irreducibility of systems. "When the wrong question is being asked," he says, "it usually turns out to be because the right question is too difficult. Scientists ask questions they can answer" (vii). Reductionism is seductive because it's *easy*, because it's comfortable, because science has a set of pre-existing concepts and modes of articulation into which it can fit. Science lacks a set of tools, at least one that has been widely recognized and appropriated (though work by scientists and mathematicians like Brian Goodwin and Stuart Kauffman suggest that such tools may be closer than we think). A shift in tools requires a concurrent shift in thought, and the habitual patterns of normal science are notoriously resistant to unsettling.

Dawkins, for instance, considers the central message of his controversial *The Selfish Gene* (1989) to be "textbook orthodoxy" as far as neo-Darwinian theories go. In the preface to the second edition, Dawkins situates the book squarely within a Darwinian paradigm: "The selfish gene theory *is* Darwin's theory, expressed in a way that Darwin did not choose but whose aptness, I should like to think, he would have instantly recognized and delighted in" (viii, emphasis in original).[3] In the first half of the sentence, Dawkins makes an explicit claim to identity with Darwin: "The selfish gene theory *is* Darwin's theory." Upon some probing by one who has read Darwin's texts, however, this anything-but-innocent statement is revealed to be a far more contentious definitional claim on the meaning of Darwin's work than the nonchalance of Dawkins' statement might lead one to believe. As the title suggests, *The Selfish Gene* argues that genes are the primary agents of evolution, and that they are not altruistic, but are out for themselves—specifically, for their own survival and replication. Thus individual bodies, far less groups of organisms, are a comparatively unimportant factor in considering the action of evolution. Bodies, Dawkins argues, are little more than "survival machines," designed to protect the real agents of evolution, the genes: "Now they swarm in huge colonies, safe inside gigantic lumbering robots, sealed off from the outside world, communicating with it by tortuous indirect routes, manipulating it by remote control. They are in you and me; they created us, body and mind; and their preservation is the ultimate rationale for our existence" (19-20). With this claim, Dawkins makes a bold

[3] Indeed, Dawkins can be seen here employing the same rhetorical device of *litotes*, or deliberate downplaying of one's accomplishments, that Michael Neff notices in his well-known examination of Watson and Crick's announcement of the discovery of the double-helix structure of DNA in *Nature*. While explaining that his earlier use of the Necker cube (a geometrical figure that can be seen two ways) as a metaphor for seeing evolution from both the angle of the gene and the angle of the individual was "too cautious" (ix), because "it suggests that the two ways of seeing are equally good" (ix), Dawkins modestly says, "I hasten to disclaim any such status for my own modest contributions" (ix). Just as Watson and Crick's humble style of declaration threw into relief the enormity of their conclusions about DNA, the reader can be sure that Dawkins' self-abnegating way of expressing his accomplishments here indicates that he is making a very big claim indeed.

statement about the meaning of the cultural formation that we know as Darwin or Darwinism, a statement that casts DNA molecules as the Prime Movers of the development and organization of life, even as it casts aside organisms, populations, and ecological systems as extras, unimportant to our understanding of evolution.

Though Dawkins' continual references to Darwin clearly position Darwin as a key authority figure for Dawkins' work, in all of *The Selfish Gene* Darwin's text is actually *cited* only one time, in an endnote. What's more, aside from the odd letter, the only text of Darwin's cited in *The Selfish Gene* is the first edition of the *Origin*. So not only has Dawkins omitted from consideration most of Darwin's work, he has also neglected the other five editions of the *Origin*, a considerable oversight or omission when one considers that Darwin revised over 75% of the Origin from the first to the sixth edition.[4] Nothing about the way Darwin's theory has been interpreted and used by well-meaning neo-Darwinians like Dawkins was pre-ordained; however, since the "modern synthesis" of the 1940s which brought together Darwin's theory of natural selection with Mendelian genetics, much of what Darwin actually wrote has been ignored or forgotten.

Any close examination of the history of theoretical biology in the twentieth century reveals that such amnesia isn't entirely accidental. Dawkins is only the logical outcome of the series of theorists who have attempted to control what we mean when we say "Darwinism." George C. Williams' *Adaptation and Natural Selection* (1966), considered to be one of the seminal texts of contemporary evolutionary biology and one that contained the seeds of Dawkins' selfish gene theory, set out to "purge biology" of what he considered to be "unnecessary distractions that impede the progress of evolutionary theory and the development of a disciplined science" (4). These

"distractions," Williams argued—concepts like group or population selection and Lamarck-inflected ideas of "cumulative progress in adaptive evolution," for instance—contradicted the basic assumption of the book, namely that "the laws of physical science plus natural selection can furnish a complete explanation for any biological phenomenon" (7).

The assumptions that underlie the dominant readings of Darwin can be seen not only in works by theoretical biologists, but also in the way that Darwin's texts are presented to the public. In the preface to the Penguin edition of the *Origin of Species* (1989), for instance, the editor informs us that Penguin chose to use the first edition rather than any of the other five, because it "presents in many ways a more clear-cut and forceful version of Darwin's theory than the later editions, in which Darwin weakened his argument" (Burrow 49). One might first be struck by Penguin's implied purpose for publishing the *Origin*—namely, not so much as a historically important or rhetorically interesting text than a relevant and still-valid scientific argument. One might also wonder what it might have entailed for Darwin to "weaken his argument." The editor of the Penguin edition writes, "there is no point in perpetuating the concessions Darwin made to [the criticisms of Kelvin and Jenkins], or his increasing reliance on a theory which modern research has not substantiated—the inheritance of acquired characters" (49). The editor is referring here to Darwin's use of Lamarck's evolutionary theory, which, as I mentioned above, Darwin came to see more and more as one essential mechanism for passing on traits. To use a version of Darwin's text that talks less about habit because the editor thinks of it as a spurious claim reveals how ingrained the assumptions of theoretical biology have become.

The importance of such editorial assumptions can be measured by the amount of difference they make to a reading of the text. Morse Peckham, the editor of the 1953 variorum edition of the *Origin*, highlights in numerical detail Darwin's habitual fiddling with revisions: "Of the 3, 878 sentences in the first edition, nearly 3,000, about 75 per cent, were rewritten from one to five times each. Over 1,500 sentences were added, and of the original sentences plus these, nearly 325 were dropped. […] In terms of net added sentences, the sixth edition is nearly a third as long again as the first" (9). Given the massive revision that took place in the *Origin*—an alteration of a whopping three-fourths of the original text—Penguin's decision to use the first edition of the *Origin* reveals the extent of its desire to control the cultural meaning of Darwin's text.

## Darwinian Seductions I: On Reading Darwin (Differently)

Certain rhetorical projects have come under intense critical scrutiny in the past decade or so for their ostensible aspirations to globalize rhetoric—that is, to create a rhetorical criticism potentially applicable to any type of text, including those outside of what has traditionally been considered the realm of rhetoric. The rhetoric of science in general, and John Campbell's rhetorical studies of Darwin's *Origin* in particular, have come to serve as a case study for critics of rhetoric's globalizing tendencies. Campbell, having devoted much of his academic career to the study of Darwin's rhetorical strategies in the *Origin*, has been targeted by these critics mainly for his agent-centered, intentionalist model of textual engagement. In "The Idea of Rhetoric in the Rhetoric of Science," for example, one of the most notorious polemics against so-called "big rhetoric," Dilip Gaonkar critiques Campbell for positioning Darwin as "a rhetorical

superstar who is always in command of the situation" (49). Since Campbell approaches Darwin's *Origin* expecting to find evidence of Darwin's rhetorical prowess, Gaonkar suggests, it seems unsurprising that he finds exactly that. Such investments in the rhetor's strategic consciousness, Gaonkar argues, turn the text into "a docile and transparent effect of that mediation. One has simply to go through a set of procedures, and the text meekly yields its secret, namely, the rhetor's purposive design" (334). Indeed, such humanist investments might potentially decrease the possibility that an encounter with a text might lead to something unexpected, different, or transformative; instead, the text is turned into something tame, familiar. One may already know how to interact with such a domesticated beast, Gaonkar implies, but this interaction is unlikely to significantly transform the way we encounter it.

But in his haste to critique Campbell's investments in agency and consciousness, Gaonkar neglects to attend to the importance of Campbell's engagement with *Darwin* in particular. In Gaonkar's analysis, the textual object with which Campbell engages is irrelevant. The proper name "Darwin" could easily be replaced with "Lamarck," "Newton," or "Lavoisier," because Gaonkar is mainly concerned with critiquing investments in the rhetor's strategic consciousness (which in this case just happens to be Darwin's). In focusing only on the rhetorical outcome of Campbell's reading of Darwin, however, Gaonkar overlooks some important aspects of the engagement itself—aspects characterized by a Darwinian logic of seduction and fascination.

What difference does it make that Campbell reads Darwin in particular? True, Darwin's status as a giant of science undeniably lends historical importance to his work, but after all, it's well known that even contemporary evolutionary biologists rarely read

Darwin anymore. However, as I will argue in this paper, Darwin has much to offer rhetoric on a conceptual level, and what he has to offer can be discovered through the very ways in which he tends to be engaged. To this end, I examine how Darwinian concepts operate in two different critical encounters with Darwin's thought. One, of course, is John Campbell's, whose project is engineered by a Darwinian fascination. The other is a seemingly unlikely candidate—the nineteenth-century writer Samuel Butler, who wrote a series of four books responding to the work of Darwin and his predecessors. I will argue that through Butler's Darwinian theories on how our seductive habits of language configure the massively interconnected network of life, we learn that Darwin himself can teach rhetoricians how to approach a text in a way that is not reductive, but reproductive. Campbell and Butler may have very different encounters with Darwin's work, but both of these encounters—not only in their content, but in their style of engagement with the text—rely on a logic of fascination and seduction.

Despite, or perhaps because of, his interest in Campbell's style of engagement, Gaonkar overlooks what seems to be the most striking thing about Campbell's work—namely, his relentless return to Darwin. In almost a dozen essays and book chapters written over a twenty-five year period, Campbell has examined Darwin's conscious rhetorical strategies for sweetening the idea of evolution for a potentially hostile audience. Such a single-minded pursuit is unusual among rhetoric of science scholars, most of whom have addressed a variety of scientists and scientific topics over the course of their careers. From an empirical standpoint, then, we might gather that Darwin has an unusually strong intellectual hold on Campbell.

In his essay, Gaonkar mostly focuses on ways in which Campbell's heroic portrayal of Darwin affects the outcome of the reading. One such outcome is the agonistic vocabulary prominent in Campbell's descriptions of Darwin's skills as a rhetorician. Gaonkar points out that words like 'battle,' 'win,' 'triumph,' and 'herculean' in reference to Darwin's rhetorical strategizing are inevitable when one assumes, as Campbell does, that "Darwin knew exactly what he was doing and that his textual practices were intentional and premeditated" (57). Indeed, one might expect to see such a martial vocabulary used in descriptions of an organism overcoming its environment (as in the *New York Times* Tuesday "Science Times" section, for example, which habitually metaphorizes natural selection as an "evolutionary arms race"). But unnoticed by Gaonkar, a different kind of vocabulary inhabits Campbell's texts alongside the vocabulary of agonism: one of seduction and fascination. In part of an essay that charts a reader's possible reactions to Darwin's rhetorical strategies, for example, Campbell seems to channel Darwin as he describes a peahen dazzled by a potential mate's flourishings: Campbell notes how Darwin's *Origin* "charms the reader" (211), how it "*draws the reader into* the company of an author who welcomes the reader as his company on the second voyage of intellectual discovery" (211, emphasis added) and what "delight" (213) a contemporary reader might take in certain passages. "Readers cannot easily resist" (211) the fascinating call of Darwin's text, Campbell writes—nor can they "avoid being implicated" (212) in its rhetorical maneuverings.

This vocabulary of fascination and seduction, interestingly enough, has strong similarities to one used by Darwin himself—as if Campbell had been wittingly or unwittingly infected by the logic of Darwin's own concept of sexual selection. Until

recently, sexual selection received far less attention than natural selection, its partner in the evolutionary mechanism. Natural selection has gained notoriety among members of the academic left mainly for how it has been used to justify problematic theoretical agendas from social Darwinism to the current obsession with "decoding" various genomes. But given the frequency with which biology has acted as an explanatory device for cultural or social phenomena, sexual selection has fared just as badly. Sue V. Rosser, for instance, characterizes Darwin's sexual selection as an "androcentric" phenomenon, arguing that "The theory of sexual selection reflected and reinforced Victorian social norms regarding the sexes" (qtd. in Grosz 33).

But sexual selection may have more to offer than we might expect—not only in terms of a specific sociopolitical agenda, but also as a way of encountering the world. As Darwin explains in *The Descent of Man*, sexual selection relies less on an organism's ability to overcome the blind vicissitudes of the environment long enough for it to leave viable offspring (as with natural selection), and more on the power to charm and be charmed:

> *Display by Male Birds of their Plumage*.—Ornaments of all kinds, whether permanently or temporarily gained, are sedulously displayed by the males, and apparently serve to excite, attract, or fascinate the females[…]. All naturalists who have closely attended to the habits of birds, whether in a state of nature or under confinement, are unanimously of opinion that the males take delight in displaying their beauty. Audubon frequently speaks of the male as endeavoring in various ways to charm the female. (406)

The language of evolution here is not agonistic, pitting organism against organism or environment in a struggle for survival, and it is not necessarily the most powerful or deadly organisms that demonstrate evolutionary fitness. Rather, in courtship rituals, the successful organisms are those with the most power to "excite, attract, or fascinate" a mate—a logic not of war, but of *seduction*. Seduction also explains, for instance, why mother birds of other species will feed cuckoo babies, brood parasites that often tower over their unwitting foster parents. Ethologists speculate that contrary to popular belief, the mother birds aren't fooled by their new, big ugly baby; it's just that they literally can't resist the bright red gape of the hungry cuckoo's bill, so much larger than that of their own children (Lack 88). Even if the baby cuckoo hasn't already managed to push all of its foster-siblings out of the nest, parent birds will often feed the cuckoo at the expense of their own children because the cuckoo's larger mouth has such a powerfully seductive effect on the parent birds' nervous systems.

Seduction, as Richard Doyle suggests, requires a blurring of the boundaries between inside and outside that puts the very self at risk for difference and transformation. It is, he says, "a kind of possession, an overtaking that signals less the manipulative power of a self than its capacity for affective transformation. And seduction was hardly an *agency*—neither active nor passive, seduction involves a summoning of alterity, the cultivation of a familiar" (3-4, emphasis in original).

Doyle's emphasis on "cultivation" and "summoning," both "neither active nor passive," suggests a different way of thinking about agency that is different from how it is typically conceived. This version of agency involves something other than a self-willed action upon somebody (or something) else, or the world, in which the self remains

free from alteration or infection by that object; rather, it involves the performance of an operation on oneself, a Self-blockage that creates the capacity to respond to something (whether an organism or a text) as it is, not as we would like it to be. The pressures of maintaining a clear and autonomous sense of self—what Brian Rotman calls the "homuncular mind," where "a tiny agent, an internal I/Me, is invoked to run the psyche" (5)—make it difficult to truly respond to alterity. To be seduced, then, is to cultivate the ability to open one's Self to the outside, to overcome the habituated sense of interiority (what Darwin's predecessor Lamarck called the *sentiment interieur*, the "inner feeling" of being alive) by allowing oneself to open to alterity, thereby cultivating in oneself the capacity for transformation.

Despite the content and avowed strategy of Campbell's treatment of Darwin (i.e., to reveal Darwin as a "wily rhetorician" rather than as "a prophet of natural selection"[55]), it seems clear both from the length of time that Campbell has spent interacting with Darwin's texts, as well as from the vocabulary of seduction that he uses, that Campbell, like the female birds described in Darwin's *Descent of Man*, has become charmed or fascinated by Darwin's texts, thus reenacting Darwin's very concept of sexual selection. As Campbell's encounter with Darwin demonstrates, reading Darwin helps us to understand how texts work through seduction of their readers. Though readers may have the illusion or appearance of control over what the text reveals (as with Campbell's attribution of various textual elements to Darwin's intentional or conscious strategy), the truth is that the agency in an encounter with the text is more distributed than one might suspect. Though some amount of truth may reside in Gaonkar's accusations that Campbell's desire to demonstrate Darwin's rhetorical skill "sanitiz[es]" (59) the

*Origin* or "flattens out its textuality" (57), it also seems clear that Campbell has less control over his encounter with Darwin than might first be imagined.

## Darwinian Seductions II: Samuel Butler and the Rhetoric of Fascination

Though separated by over a century, Campbell and Samuel Butler (1835-1902), form an interesting chiasmus in their encounters with Darwin. In contrast to Campbell's overt fascination with Darwin, at first glance (and by his own pugnacious insistence) Butler gives every indication that he has decidedly resisted Darwin's seduction.

Born in 1835 in Nottinghamshire, Butler had a bitter relationship with his authoritarian father, fictionally chronicled in Butler's posthumously published novel *The Way of All Flesh* (1903). While that novel, along with his utopian satire *Erewhon* (1872), gained Butler a lasting reputation as a minor nineteenth-century literary figure, Butler actually was a prolific writer with a wide range of interests. In his lifetime he wrote about his travels in Italy, a satire on Christianity, a speculation that the author of the *Odyssey* was actually a woman, and a series of four books that respond to Darwin's theory of evolution by natural selection.

Butler first encountered Darwin's *Origin* in New Zealand, where he had emigrated to try his hand at raising sheep after running away from a clerical education at Oxford. There he read Darwin repeatedly, an encounter that produced a satiric essay called "Darwin Among the Machines," later published as two chapters called "The Book of the Machines" in *Erewhon*. Though the essay ostensibly pokes fun at Darwin's theory, comments by Butler and others indicate that Butler could not entirely resist the concepts that he was supposed to be satirizing. The essay reads strangely—the narrator's point of

view remains ambiguous throughout, and the argument that machines represent the next stage of evolution is humorous (an argument captured most recently by Alex Proyas's film *I, Robot*) , but also faintly disturbing in its prescience.

Butler's interest in the theory of evolution found an outlet in his next book, *Life and Habit* (1877), which bills itself as merely a dilettantish speculation, Butler's purported aim being "simply to entertain and interest the numerous class of people who, like myself, know nothing of science but who enjoy speculating and reflecting (not too deeply) on the phenomena surrounding them" (1). This perhaps falsely modest disclaimer was belied, however, when toward the end of his work on the book, Butler discovered to his surprise that Darwin had not been the first person to write about evolution, but was preceded by, among others, Lamarck and Darwin's own grandfather Erasmus. Spurred by what he saw as the unfairness of Darwin's silence about his predecessors, Butler wrote three more books on evolutionary theory (*Evolution Old and New*, 1879; *Unconscious Memory*, 1880; and *Luck or Cunning,* 1886), in the process embroiling himself in a bitter public (if mostly one-sided) debate with Darwin's supporters,[5] including most notably George Romanes and Alfred Russell Wallace. Butler's contemporaries were most angered by his *ad hominem* attacks on Darwin, and condemned him for pestering somebody far above his station.[6]

However, if one pays less attention to the content of Butler's attacks on Darwin (which seem, in the end, to be motivated by a resentment of authority and a desire for recognition), and more to what his texts *do*, it becomes clear that Butler's sustained

[5] This interesting debate has been extensively chronicled, often to the exclusion of a sustained engagement with Butler's work. See, for example, Pauly.
[6] Butler's attacks still apparently anger some—for an example, see Morton.

wrestling with Darwin's ideas has opened him up for a deep transformation. Toward the end of *Life and Habit* Butler describes the process by which he became seduced and subsequently transformed through his engagement with Darwin's work:

> I admit that when I began to write upon my subject I did not seriously believe in it. I saw, as it were, a pebble upon the ground, with a sheen that pleased me; taking it up, I turned it over and over for my amusement, and found it always grow brighter and brighter the more I examined it. At length I became fascinated, and gave loose rein to self-illusion. The aspect of the world seemed changed; the trifle which I had picked up idly had proved to be a talisman of inestimable value, and had opened a door through which I caught glimpses of a strange and interesting transformation.

As this passage suggests, Butler's interest in writing about Darwin's text was motivated less by his desire to understand it than by his *fascination* with it, an interest indicated by how Butler describes his method for engaging Darwin's text. The way to approach an object (like a text, for instance) is "idly," without "seriously believing in it"; that is, without an investment or stake, without something that one hopes to find or to gain from one's interactions with the object. Nonetheless, to desire an engagement in the first place, one must have been somehow affected by the object; it must have arrested one's attention—perhaps it was simply an unusual but attractive characteristic that caught one's eye, a "sheen that pleased," a particular turn of phrase. But in this logic of engagement, one does not automatically know what the object is or what should (or can) be done with it. Rather, the object must be interacted with on its own terms, and what those terms are

can only be discovered through *experimenting* with the object. Grinding up a pebble and analyzing its mineral constituents, for instance, might help one to "understand" the pebble better—but only on the grounds of a previously established logical paradigm (i.e., the kind of logic that says knowledge can be best gained by breaking objects, or texts, down into their parts and cataloguing them). This kind of attempt to understand the world, as Nietzsche tells us, gives us "at best a feeling of assimilation" (251), an unsatisfactory feeling if what one hoped to encounter was difference.

More importantly, an engagement on terms established by a previous logical paradigm cannot allow one to discover what the pebble is useful for *as a pebble*. To discover this, one might start simply by playing with the pebble ("I turned it over and over again for my amusement"), interacting with it on its own terms, letting the form of the object guide the types of interactions it can produce. Here Butler captures the importance of experiment, of practice—one can think, rationalize, or discuss a problem or situation as much as one wants, but transformation or learning requires a *doing*, a willingness to risk ignorance or failure in the process of interaction or engagement. In other words, it is only the real, physical interaction with a specific situation or problem that opens up the possibility of difference. Through an accumulation of such interactions between the handler and the pebble, a transformation occurs. The pebble appears to change states ("it grew brighter and brighter"), to acquire a seductive glow, one that its handler cannot resist: "at length I became fascinated."

"Fascination" in its etymology is associated with witchcraft—"to bewitch, enchant, lay under a spell," and more generally, "To deprive of the power of escape or resistance, as serpents are said to do[…]" (*OED*). Both of these definitions imply a

certain helplessness or passivity on the part of the one being fascinated, the overcoming of one will by the forceful pull of another. Becoming fascinated implies the possibility of being eaten (like a mouse fascinated by a snake) or at least the risk of serious danger to one's body or soul. Though later definitions of "fascinate" became recoded as more positive—"To attract and 'hold spellbound' by delightful qualities; to charm, enchant" (*OED*) —the word has never entirely lost its sense of the danger risked by giving oneself over to the will of another. This positive recoding, though, increases the possibility that one might cease to resist one's fascination, that one might in fact desire it, seek it out. Such seems to be the case with Butler and Darwin's work (the "pebble"). The fascination arises through an interaction or engagement of Butler with Darwin's ideas, not through the forced subjection of Butler's will. And through these repeated engagements, Butler's will becomes spellbound; something has shifted in his familiar sense of self. This blockage of the familiar allows something else to emerge: "I caught glimpses of a strange and interesting transformation," in which even "the aspect of the world seemed changed." Allowing himself to be fascinated in the sense of charmed or enchanted not only changes Butler's habitual sense of himself, but also produces a difference or transformation in the way he views (and thereby interacts with) the world.

Language in the style of reading that Butler describes in this passage works less like a signifying device or a vehicle for the transmission of meaning than like a Zen *koan*. Koans are riddles, generally given to a student by a teacher in the context of a ceremony or retreat. The tricky part is that a koan doesn't really have an "answer" in the way we would typically imagine—that is, the question or phrase given has no explanation that partakes in our general logical or commonsense understanding of the world. Rather,

koans are designed as tools for transformation; they *work on* the student's mind in order to break open his or her ordinary understanding of things, the habitual ways that he or she has come to perceive and interact with the world. Koans like *Mu* ("emptiness"), or "If you meet the Buddha on the road, kill him," though presented in ordinary language, make little rational sense. Nor are they meant to. In fact, says Roshi Phillip Kapleau, editor of the key Western Zen text *The Three Pillars of Zen*, a koan does its work through fascination; it forces the mind to engage while ruthlessly eluding it: "By wheedling the intellect into attempting solutions impossible for it, koans reveal to us the inherent limitations of the logical mind as an instrument for realizing ultimate Truth" (70). Through the process of engaging or wrestling with the koan, of fully experiencing the confusion, frustration, and doubt that comes of trying to solve it, the student cultivates the capacity for difference or transformation. Once the student has reached a critical level of feeling, such a transformation (what Zen literature refers to as *kensho* or *satori*) can occur, shattering the student's habitual world views.

The understanding of language in Zen is radically different from the way that we are accustomed to thinking about it, namely as meaning, representation, or communication. In fact, such uses of language (*i.e.*, those that partake of a logical or rational paradigm) are actively discouraged in Zen practice: "When abstract, theoretical questions are asked during *dokusan* [a private session with a teacher] (as they sometimes are) the roshi frequently throws them back at the questioner, to try to make him see the source from which they issue and to relate him to that source" (75). Even when the roshi or teacher provides commentary on the koans before a meditation session (to prepare the students to receive the koan in the right way), he or she is not interested in a discussion or

explanation of the "meaning" of the koan. Accordingly, the roshi faces the altar, not the meditators. Instead, Kapleau says,

> The roshi's object is to relive the spirit and drama of the koan, to bring alive through his charged words and gestures the truth inherent in the roles of the various protagonists.[...] In Zen parlance, the roshi 'strikes against' the koan from his *hara*, trusting that the emitted sparks of truth will illumine the minds of his hearers. It is from the hara, then, that the roshi must deliver his commentary if it is to glow with the spirit and force of his entire being, and similarly it is in their hara that his hearers must focus their minds if they are to grasp and absorb directly and whole the palpitating truth he is thrusting at them. (73-74)

Language here seems rather unnerving in its liveliness—when one strikes against it, it emits sparks. It has a charge. It *palpitates.*

Butler's engagement with the *Origin*, regardless of his eventual disagreement with Darwin, partakes in the logic of the koan more than the logic of epistemology or understanding. And like a persistent Zen student, Butler's sustained engagement with Darwin leads eventually to a transformation in his perception of the world: "it had opened a door through which I caught glimpses of a strange and interesting transformation" (250).

Evidence of the transformation wrought through this Darwinian logic of fascination reveals itself in Butler's four-book response to Darwin. Even given Butler's overt critique and eventual downright enmity to Darwin and the idea of natural selection, his books nonetheless spin the repetition and complexity of Darwin's work to its logical

limit, an intensification of Darwin that teaches us to read it differently. The idea of fascination as it demonstrates itself physically in avian courtship rituals, for example, requires a blurring of the boundaries between self and other, inside and outside—when one is fascinated, the boundaries of the self are no longer so clearly defined; one opens oneself up to love, and possibly even to the panic that comes when boundaries previously thought to be stable are breached or disturbed. Butler performs this idea of fascination in *Life and Habit*, enacting Darwin's idea of sexual selection by showing that no organism is the bounded, autonomous entity that it appears to be; rather, organisms are rather leaky affairs, prone to merging with everything else.

The reality for Butler, obscured by our habits of perception and language, is that the borders of organisms are much less fixed than we tend to imagine. We conceive of our personality, for example, "as a simple definite whole; as a plain, palpable, individual thing, which can be seen going about the streets or sitting indoors at home; as something which lasts us our lifetime, and about the confines of which no doubt can exist in the minds of reasonable people" (64). Upon closer examination, however, what appears to be a unified and autonomous entity is revealed to be a nebulous aggregate:

> as the component parts of our identity change from moment to moment, our personality becomes a thing dependent on time present, which has no logical existence, but lives only upon the sufferance of times past and future, slipping out of our hands into the domain of one or the other of these two claimants the moment we try to apprehend it. And not only is our personality as fleeting as the present moment, but the parts which compose it blend some of them so imperceptibly into, and are so

> inextricably linked to outside things which clearly form no part of our personality, that when we try to bring ourselves to book, and determine wherein we consist, or to draw a line as to where we begin or end, we find ourselves completely baffled. There is nothing but fusion and confusion. (79)

Like William James's conception of the "many-mes," Butler considers the Self or the "I" to be shorthand for a multiplicity that continually changes form. The self, he says, is not an atomistic entity, nor does it transcend time to form a continuous whole that remains steady from the moment we are born until the moment we die. In other words, there is no solid internal core upon which the bedrock of our identity is formed. Rather, what we call the Self is contingent upon an uncountable and ungraspable series of present moments, which is tantamount to saying that nothing exists to which to pin the term "self" or "I". We are only entities of the thin sliver of the continuously changing present, Butler says, which is forever splitting off into the past and the future. The only reason we see ourselves (and others) as autonomous entities is because habit has made us forget.

The nebulousness and fluidity of this self extends both to time and space. Though we tend to conceive of the bodies of organisms as integrated wholes, containing a distinct interior and exterior marked by clear boundaries, Butler argues that we are so much a part of everything surrounding us that we have difficulty determining where we begin and the world ends. Our bodies act as a permeable interface between the inside and the outside, and thus, Butler says, "We find that we melt away into outside things and are rooted in them, as plants into the soil in which they grow […]" (65). Even the inside of our bodies is not exclusively ours, but relies on bacteria to carry out many of its processes (an

observation shared by contemporary molecular biologists and Gaia theorists Lynn Margulis and Dorion Sagan), a blurring of boundaries that makes organisms buzzing, swarming heaps of interconnectedness: "[Man] is such a hive and swarm of parasites," Butler writes in *Erewhon*," that it is doubtful whether his body is not more theirs than his, and whether he is anything but another kind of ant-heap after all" (197). Thus, though we think and speak of ourselves as autonomous and active agents of change, our bodies are less "ours" than we might think.

The inability to completely distinguish one organism from another, when viewed on a large scale, creates a dizzying multiplicity, Darwin's image of the "entangled bank"[7] taken to the nth degree. If interiors and exteriors are so twisted and blurry, Butler argues, it becomes possible to think of the planet less as housing a variety of individuals and more as one large organism in itself with many different centers of feeling and action:

> How is it that the one great personality of life as a whole, should have split itself up into so many centers of thought and action, each of which is wholly, or at any rate nearly unconscious of its connection with the other members, instead of having grown up into a huge polyp, or as it were coral reef or compound animal over the whole world, which should be conscious but of its own one single existence[…]? (84)

As Butler suggests, it is somewhat remarkable that we can still maintain the sense of ourselves as individual organisms instead of as interconnected with a more massive, many-faceted being, a state of affairs that has marked all of Western history as we know it. But this kind of forgetting, as Darwin predicted, was necessary for us to maintain the

[7] "It is interesting to contemplate an entangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent on each other in so complex a manner, have all been produced by laws acting around us" (*Origin* 459).

idea of ourselves as Selves, separate from each other and from the world. Like his contemporaries Nietzsche, William James, and Henri Bergson (along with his grandfather, Butler's namesake and the Bishop of Lichfield), Butler recognizes the tendency of language to reify things and concepts that by nature are less solid or self-evident than they appear:

> [A]ssuming that we know what is meant by the word 'person,' we say that we are one and the same person from birth to death. […] This in practice is found sufficient for the law courts and the purposes of daily life, which, being full of hurry and the pressure of business, can only tolerate compromise, or conventional rendering of intricate phenomena. […] The metaphors and *facons de parler* to which even in the plainest speech we are perpetually recurring (as, for example, in these two lines, 'plain,' 'perpetually,' and 'recurring,' are all words based on metaphor, and hence more or less liable to mislead) often deceive us, as though there were nothing more than what we see and say, and as though words, instead of being, as they are, the creatures of our convenience, had some claim to be the actual ideas themselves concerning which we are conversing. (67-68)

Butler's reference to the law courts in this passage seems especially fitting in a description of the deceptive or misleading aspects of language—an accusation that has been thrown at rhetoric for millennia. However, Butler is not pointing in this passage to the possibility of a truth that one could somehow get at through language, as Plato did; rather, language by its very nature deceives because it is based on a forgetting that is fundamental to it. We employ words, the "creatures of our convenience," as a sort of

shorthand or marker for such intricate phenomena as the concept of personal identity; however, eventually we forget that these words only suffice as "conventional renderings" of such nebulous phenomena. Thus we identify the words (which point to one apparently solid concept) as the thing or idea itself, a mistake that Dawkins and other contemporary theoretical biologists have perpetrated in the case of Darwin's work.

As we've seen both in Gaonkar's reading of Campbell's reading of Darwin as well as in contemporary theoretical biology's use of Darwin, certain styles of engagement with texts can at their mildest limit the possibilities of texts, and at their most virulent, do them violence. In the field of rhetorical theory, much careful attention and interest has been recently given to the question of what it means to read ethically. How does one read so as to do justice to the text, to allow it to speak? One must let the text do its work on oneself, to learn how to listen attentively and with great care to a text. Samuel Butler teaches us to respond to a text not in an aggressive way—that is, with a manner of reading that already knows what it wants to find in a text, or that has a desire to exert one's will onto it. Instead, what Butler offers is a method of reading that, if done correctly and with great attentiveness, poses much possible danger to the Self. What we learn from Butler is how to develop the capacity to become fascinated by a text, to let it do its work on us rather than the other way around. The possible transformation that such a giving over of oneself (one's Self) to the text can entail, though, may prove to be well worth the risk.

## Biophilia and *The Extended Phenotype*

> I have argued in this book that we are human in good part because of the particular way we affiliate with other organisms. They are the matrix in which the human mind originated and is permanently rooted, and they offer the challenge and freedom innately sought. To the extent that each person can feel like a naturalist, the old excitement of the untrammeled world will be regained. I offer this as a formula of reenchantment to invigorate poetry and myth: mysterious and little known organisms live within walking distance of where you sit. Splendor awaits in minute proportions.
>
> -Edward O. Wilson, *Biophilia* (139)

Lest it seem that Dawkins comes out in this chapter as the villain, I want to discuss a final example of a (perhaps not entirely willing) Darwinian seduction. In Dawkins' *The Extended Phenotype* (1982/1999), a somewhat less successful follow-up to *The Selfish Gene*, Dawkins appears to recognize the difficulty of applying the selfish gene theory to organisms that (as Butler via Darwin noticed) are fundamentally leaky. The *Extended Phenotype* reveals a real tension between the desire to maintain the supremacy of the gene and the realization that life keeps slipping its boundaries. Dawkins is at his best when he drops his philosophical attack dog mode and focuses instead on his field of expertise, which is ethology or animal behavior.

What we know about genes from *The Selfish Gene* is that they inhabit survival machines. But of course, when one talks about animal artifacts and animal behavior, we're talking no longer about structure or features that can be said to inhere in and issue from a particular body/survival machine, but rather features that extend beyond the individual body. Take the caddis fly larvae's "house," for instance, which it makes from little stones that it finds on the bottoms of the streams it inhabits. A hypothetical population of caddis fly larvae has two different colors of houses, dark and light, where dark is the dominant color in the population. In this imaginary population, the caddis flies have genes that work via a behavioral mechanism to choose stones of a particular color. Therefore, the gene contained 'inside' the caddis fly requires items (stones) that exist outside of the larvae's physical body to express itself. The logical conclusion that

we can draw from this, Dawkins says, is "once we have accepted that there are genes for building behavior, the rules of existing terminology imply that the artifact itself should be treated as part of the phenotypic expression of genes in the animal…We have taken the first step of extending the concept of a gene's phenotypic effect outside the individual body" (198). So far so good—this wrinkle does not necessarily affect the theory of the selfish gene if the extracorporeal artifact exists directly adjacent to the individual organism, as in caddis fly larvae houses, spiders' webs, and beavers' dams (even counting the lake in which the beaver builds the dam as part of its extended phenotype); interiors and exteriors of organisms might get a little muddled, but it's still proximal enough for the effect of the selfish gene to be at work.

But when Dawkins pushes the idea of the extended phenotype still further, he seems to overreach the grasp of the selfish gene. In an example that involves snails and trematode parasites (flukes) that live in the snails' shells, the snail shells that contain flukes will be thicker in order to protect the parasite. One might argue that these thicker shells resulted from environmental, not genetic changes in the snail; but, Dawkins asks, what if the thicker shells were an expression of the genes of the fluke? This would be akin to saying (as Dawkins does say) that the genotype of one organism can be expressed as the phenotype of another!

So, one might ask, where do we make the cut? If, as Dawkins argues, one organism's genotype can be expressed as another organism's phenotype, and if non-organic aspects of an organism's environment also can be considered an expression of its genotype, it seems that Dawkins opens the way for a vast network in which organic beings do not simply act or operate upon inorganic objects and other living beings, but

are actually bound up with and inextricable with these things, dependent on them for survival. What we consider to be living or organic cannot be thought apart from the nonliving or inorganic, in other words. Thus, not only is the idea of a clearly bounded interior and exterior called into question, but the very idea of individuality as well. Dawkins says, "My hunch is that almost all phenotypic characters will turn out to bear the marks of compromise between internal and external replicators' sources" (248). One wonders what happens to the selfish gene after Dawkins makes such an admission. It seems lost in the complexity gained when Dawkins and others, following Darwin's example, pay an obsessive amount of attention to life. Anyone who seriously investigates such questions about the evolution and borders of individual organisms inevitably seems to fall into the same realm, where it becomes impossible to once and for all separate organisms from the networks of organic and inorganic forces in which they are enmeshed—seduced, as it were, by life itself. As Darwin suggests, life itself seems to induce a habitual forgetting, while simultaneously providing the means for remembering its complexity.

# Chapter 3

## On Speaking Terms With the Universe: William James's Radical Habit of Self-Experiment

It was June in the Adirondacks, and William James was in love. Though 53 and happily married, he nonetheless had a giddy, joyous schoolboy crush on a schoolgirl: Pauline Goldmark, the 21-year-old daughter of one of his hunting friends at Putnam Camp. James's biographer suggests that Pauline was one of the main reasons that James told his wife Alice that being in the Adirondacks that summer made him "happy! happy! happy!" In June of 1898, just before he was to travel to San Francisco to give a series of "talks to teachers," James hiked up Mount Marcy, the highest peak in the Adirondacks, and then down into Panther Valley to meet Pauline and her friends at the lodge there for an evening. As he lay there that night, everyone around him asleep, the combination of the clear Adirondack night, the moon, the smoke from the fire that rose in a straight column to the sky, and the proximity of Pauline, all served to put him into what he called in a letter to Alice describing that night "a state of spiritual alertness of the most vital description":

> The influences of Nature, the wholesomeness of the people around me, especially the good Pauline, the thought of you and the children…the Edinburgh lectures, all fermented within me until it became a regular

> *Walpurgis nacht*. I spent a good deal of it in the woods, where the streaming moonlight lit up things in a magical checkered play, and it seemed as if the gods of all the nature-mythologies were holding an indescribable meeting in my breast with the moral gods of the inner life…The intense *significance* of some sort, of the whole scene, if one could only *tell* the significance; the intense inhuman remoteness of its inner life, and yet the intense *appeal* of it; its everlasting freshness and its immemorial antiquity and decay…it was indeed worth coming for, and worth repeating year by year, if repetition could only procure what in its nature I suppose must be all unplanned for and unexpected." (*Correspondence* 8 391).

In his heightened state of attention in this moment in the forest, James's body itself becomes host to a field of intensities across which both percepts and mental forces play: the physical presences of moon, smoke, and the dark of the night; the flows of erotic desire and excitement; the anxieties and intellectual affects—"all fermented within me," he says, in a way that confuses the boundaries between forces of the exterior and forces of the interior. Who, one might ask, is doing the experiencing here? Accompanying this intensification is James's recognition of the impossibility of subjectively "owning" this experience; the moment resists domestication, is "inhumanly remote." Instead, it is something that has taken hold of James, that has happened *to* him; an event that has played itself out *upon* and *through* his body, but not necessarily *because* of it.

What's especially intriguing about James's description of this event from a rhetorical standpoint is that despite its intense appeal for James (both the affective,

pleasurable sense of appeal as well as its function as a persuasive force), he finds it impossible to adequately portray the event in words. With a vague tone of lament, he says, "if only one could *tell* the significance," alluding to a possible failure of the representative or discursive function of communication. And though James longs for the potential that this moment of spiritual communion could be repeated—could, perhaps, become habitual—as with all the mystical experiences that he examined throughout his life, it was something entirely singular. Such an opening could have happened only *this* night and with *these* elements in the presence of *this* girl.

Scholars and biographers often cite this biographical scene, especially since it was during this hiking trip that James allegedly put the strain on his heart (ironically) that would eventually cause his death. But it's also significant because it brings together elements that James comes back to habitually throughout his writing: namely, his intense love of life and sensitivity to experience; his longing for a moment of radical communion with an Other that would effect a transformation in and reveal the habitual nature of the Self; the ineffability or rhetorical failure that inevitably accompanies such moments of mystical experience; and finally, the desire to invent practices that might enable its repetition. This chapter examines James's philosophy of pluralism and radical empiricism, and its relation to the powerful forces of habit that figured so prominently in his work. It also examines a specific rhetorical and material practice that James used to negotiate habit and the Self; namely, his repeated self-experiments with nitrous oxide and other drugs.

## On Speaking Terms with the Universe

James's enthusiastic, energetic love of life, hinted at in this brief biographical episode, prompted one of his former students to write in an encomium that "Sunlight and stormcloud, the subdued busyness of outdoors, the rumble of cities, the mud of life's beginning and the heaven of its hopes, stain his pages with the glad, sweaty sense of life itself" (*WJR* 257). This "glad, sweaty sense of life" is reflected in James's philosophy of pluralism or "radical empiricism," as he called it, a philosophy that attempted to account for life in all its wild, messy immediacy, and which led James to reject metaphysical systems that tried to contain this messiness in favor of cleaner, more rational explanations. James declared that he would rather be *acquainted* with life in all of its disparate parts and hangings together—what he calls elsewhere the "concatenated union"—than to try to *understand* it by making sense of a whole.

In his posthumously published *Essays in Radical Empiricism* (1912), James makes an argument for an ethical relation between Self and world:

> The secret of a continuous life which the universe knows by heart and acts on every instant cannot be a contradiction incarnate. If logic says it is one, so much the worse for logic. Logic being the lesser thing, the static incomplete abstraction, must succumb to reality, not reality to logic. Our intelligence cannot wall itself up alive, like a pupa in a chrysalis. It must at any cost keep on speaking terms with the universe that engendered it. (94)

Here James designates the relationship between individual intelligence and the universe specifically as an *ethical* relationship, one explicitly configured as *rhetorical.*

But what does it mean to be "on speaking terms with the universe," and more to the point, who is the one who is capable of such a relation? Clearly this speaking relation is not characterized by rationality or logic, or by the extractable and repeatable production of knowledge *about* the universe. To enter into this relation requires a profound openness, a capacity for hospitality to the Other, the ability to inhabit and endure this space of relation.

This continuous life, what James described in an essay on Bergson as "the living, moving, active thickness of the real" is something incarnate—something embodied. Such a view of the rhetorical relation with the universe directly contradicts the neo-Kantian and Hegelian systems that attempt to order all of the disparate parts of existence under one logical system. James is suspicious of philosophical impulses to create abstract systems, primarily because the love of systematizing elements of experience into one knowable whole must inevitably leave so much residue of things that cannot be explained by the system that the "sentiment" of rationality, i.e., the sense of being at ease with the world and one's explanation of it, is once again disturbed and sends the mind off into new paroxysms of seeking. What's more, James says, this interest in systematizing does violence to the "teeming and dramatic richness" (69) or "mightily complex affair" (70) that is life as we ordinarily experience it: "It is a monstrous abridgment of life, which, like all abridgments is got by the absolute loss and casting out of real matter" (69).

Indeed, the mind, once set on the task of systematization, grows so much in the habit of looking beyond a given concrete experience for an explanation, forever "pointing at the void" (72), as it were, that eventually, through its inability to rest in any particular experience and give up its ceaseless search for further explanation that it develops an

"ontological wonder sickness" (72) that grows more intense the more perfect the explanation of system gets. This ontological wonder sickness, created essentially by an engine of unceasing lack, reaches its zenith in the philosophy of Hegel. Hegelism provides a nearly perfect explanation of system that satisfies the rational impulse, but has the unfortunate effect of making the self that falls for it absolutely impotent. "If thought is not to stand forever pointing at the universe in wonder," James says, "if its movement is to be diverted from the issueless channel of purely theoretic contemplation[…]" (75), it is necessary to divert this thought into more active and practical directions.

As such, James says, "The only way in which to apprehend reality's thickness is…to experience it directly by being a part of reality one's self…" (*PU* 112). But how does one develop the capacity to keep on speaking terms with the universe, to be directly acquainted with it rather than walled up alive? It's not simply a matter of *deciding* that one is going to be on speaking terms with the universe; rather, one has to develop *practices* for doing so. To develop these practices requires a negotiation with another powerful force, one central to James's work—namely, habit.

## Habit

Habit was described by James's former research assistant James Rowland Angell as something that "may in certain ways be regarded as the most important interpretive principle running through his work and the one which enlisted the widest and most immediate interest" (135). Indeed, the chapter on habit in James's 1890 book *Principles of Psychology* was considered to be one of the most engaging and interesting in the book, and habit continued to recur in James's work throughout the rest of his life. Tursi,

Thomas, John McGowan—lots of people have already given much attention to James's use of habit.

Habit for James is one of the definitive characteristics of organisms, as his famous statement at the beginning of the *Principles of Psychology* chapter suggests: "When we look at living creatures from an outward point of view, one of the first things that strikes us is that they are bundles of habits" (*PP* 104). James told his audience of teachers in San Francisco that habits make up "nine hundred and ninety-nine thousandths of our activity" (*TTT* 33), making habit not only second nature, but "ten times nature" in its importance to daily life. Habit is also explicitly figured as a corporeal phenomenon—James says, "I believe that we are subject to the law of habit in consequence of the fact that we have bodies" (*TTT* 33). It provides a way for us to live productively in the world by acting to delimit our range of possible perceptions and activities:

> Man is born with a tendency to do more things than he has ready-made arrangements for in his nerve-centres. Most of the performances of other animals are automatic. But in him the number of them is so enormous, that most of them must be the fruit of painful study. If practice did not make perfect, nor habit economize the expense of nervous and muscular energy, he would therefore be in a sorry plight. (*PP* 113)

Habit here thus acts as a culling force of sorts; by repeating a particular set of movements, the initial, unnecessary extras eventually get cut. The body is initially prolific with its movements when attempting to adapt to a task for which it is not already organized, preferring to overshoot rather than undershoot its target. James uses William Carpenter's example of the pianist learning to play the piano, who at first uses his entire

body to press the keys. But because most of the energy is directed to the hand, the rest of the body, being unnecessary to the performance of the task, eventually gets left out of the equation as the hand "learns" to play. As an extension of its culling operations on physical movements, habit also works to cull conscious attention to an activity. The more often a series of movements is repeated, the less attention is needed to complete the series: thus, despite the enormous amount of concentration and attention required for a hunter initially learning how to shoot grouse, after his muscles and nerve paths "learn" the movement, such a high level of conscious attention is no longer needed, and, in fact, probably hinders his hunting ability. "The marksman sees the bird, and, before he knows it, he has aimed and shot" (*PP* 114). *Before he knows it* is the operative phrase here—overt knowledge or consciousness can be more of a hindrance than a benefit in performing actions. Such a diminishment of consciousness or pre-knowing, which also serves as a force of absent-mindedness, the "lower centres know the order of these movements, and show their knowledge by their 'surprise' if the objects are altered so as to oblige the movement to be made in a different way. But our higher thought-centres hardly know anything about the matter" (*PP* 115). The so-called "lower thought centres" that James talks about here are most likely related to our contemporary notions of the proprioceptive body. People long practiced in a skill get "a feeling of it," what we would refer to today as "muscle memory"—therefore a knitter, for instance, gets a feeling for knitting in her hands, and will say that her hands know what feels right, though her mind may not be able to distinguish between all the movements.

But though the tendency of the body to form habits reveals its built-in plasticity, what Elizabeth Wilson calls the "constitutive permeability of biology" (66), it also means

that once certain tendencies in behavior and thought are formed, they generally stick, and they also limit and configure the self's relation to the world. In what is probably the most cited passage on habit, James says,

> Habit is thus the enormous fly-wheel of society, its most precious conservative agent.[…] Already at the age of twenty-five you see the professional mannerism settling down on the young commercial traveler, on the young doctor, on the young minister, on the young counsellor-at-law. You see the little lines of cleavage running through the character, the tricks of thought, the prejudices, the ways of the 'shop,' in a word, from which the man can by-and-by no more escape than his coat-sleeve can suddenly fall into a set of new folds. (*PP* 121)

Clearly, habit is a force to be reckoned with. Because it arises out of experiential engagement, a material interaction between body and world, habit is a crucial factor in our relation to the Outside, and without a certain measure of attentiveness and a complicated function of will, it can structure this relation in a fairly narrow and limited way.

Because habits arise out of material engagements, a material engagement is thus also required to alter or transform them—that is, what's required is not just *understanding* how habit structures one's relationship to the world, but in actually *doing* something about it—that is, through developing sets of practices that can enable one to recognize and negotiate habit. Pedagogically speaking, James offered all sorts of advice for teachers to help their students develop habits of virtue (one can hear echoes of Aristotle here—virtue is not just the expression of some inner quality of virtue, but it has

to be produced through the repetition of virtuous actions). James thus conceptualized habit as a powerful force that required continual negotiation. His recognition of the need to negotiate habit (in conjunction with his uncomfortable relations to the tradition of Swedenborgian mysticism that he had grown up with, thanks to his father, Henry Sr.), led him to continually seek shake-ups in habit of a more radical kind. His self-experiments with nitrous oxide and other drugs, and his continuing interest in psychical research provided him with one means for such a shake-up. The rest of the chapter examines these episodes.

## Psychedelic Science

James is rarely thought of as a pioneer in the field of psychedelic exploration.[8] In fact, his frequent incursions into what he called "the border-land of human experience"(*EPR* 7)—investigations of the effects of drugs on the self, along with his study of automatism, hypnotism, thought transference, and mystical experience of all sorts—have been most often regarded by biographers and scholars as historically interesting oddities, distractions from James's more respectable intellectual pursuits in the fields of early psychology and pragmatic philosophy.[9] Yet these oddities provide a

[8] The term *psychedelic*—literally, "mind-manifesting"—was coined in 1957 by the psychiatrist Humphry Osmond, who used LSD to treat patients with addiction and other psychiatric ailments. Osmond considered several other names for these substances, including *psychephoric*, "mind-moving"; *psychezynic*, "mind-fermenting"; and *psycherhexic*, "mind bursting forth", before finally settling on *psychedelic*, because, as he said, it was "clear, euphonious, and uncontaminated by other associations" (418). Psychedelics are associated in the popular mind with hallucination-producing drugs like LSD and psilocybin, not anesthetics like nitrous oxide; however, in keeping with the purposes for which James used nitrous oxide and other drugs, I decided to use the term "psychedelic" to describe James's drug experiences. The appropriateness of this term in relation to James's self-experiments is also suggested by Osmond himself—in the same article in which he coined *psychedelic*, he says, "The great William James endured much uncalled-for criticism for suggesting that in some people inhalations of nitrous oxide allowed a psychic disposition that is always potentially present to manifest itself briefly" (418).

[9] Ralph Barton Perry, James's student and the author of an authoritative early biography of James, includes an account of James's experiments with nitrous oxide in the chapter called "Morbid Traits," thus providing

great deal of insight into (and did a great deal to change) James's conception of the ethical relation between self and universe, as well as revealing for him the limitations of normal or habitual consciousness. From these deliberate scientific attempts to study the limits of the self while under the influence of various substances—nitrous oxide, mescal, ether, chloral, and amyl nitrate, among others—James gleaned insight into the effects of habit on the self, and caught glimpses of a new mode of existence, one that recognizes the self as being inextricably bound up in an ecology with all other beings.

What makes James a pioneer in the field of psychedelic science rather than just another intrepid explorer or recreational dabbler was his desire to study the subjective effects of drugs *scientifically*. Somewhat paradoxically, by undertaking such self-experiments in the spirit of scientific inquiry, James helped to crystallize a small community of scientists devoted to the subjective investigation of nitrous oxide and other drugs. The "object" of study, then, was not so much the physiological and mental effects of the drugs as the Self itself. But to understand what makes these self-experiments especially interesting requires an understanding of James's view of the relationship between science and the phenomena that he classified as "mystic" or "psychical," phenomena that have been traditionally excluded from the purview of orthodox science.

Running parallel to James's more "respectable" (as defined by the nineteenth century academic and scientific establishment) studies in psychology and pragmatist philosophy were his career-long pursuits in the areas of the paranormal (then called

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a fairly good idea of how many people in James's day and after regarded these experiments: with discomfort and more than a little embarrassment. Of James's comparison of the nitrous oxide revelation with Hegelism, Perry says (rather scoldingly), "Now this incident suggests the child playing with matches, or irreverently mocking the devout. It was, in fact, both of these things. James was incorrigibly and somewhat recklessly curious, and he derived enjoyment from deflating the solemnity of pundits." As of late, however, several scholars have considered James's nitrous oxide use more seriously; see especially Tymoczko and Barnard.

"psychical") and religious experience, areas of study that were at best ignored and at worst mocked by his more conservative scientific colleagues.[10] In the hopes of establishing a semi-institutional space for the study of psychical phenomena, James helped found the American Society for Psychical Research (1884-1906). The SPR was a sister organization to the English society of the same name, which announced itself as existing "for the purpose of making an organized and systematic attempt to investigate that large group of debatable phenomena designated by such terms as 'mesmeric,' 'psychical,' and 'spiritualistic'"(5)— a sort of nineteenth century *X Files*.[11] While the Society's charter did not specifically include the systematic investigation of the effects of drugs in its spheres of investigation, most of the "nitrous oxide philosophers" whom James persuaded to replicate his psychedelic experiments also happened to belong to the Society. [12] Investigating psychic phenomena and self-experimenting with drugs provided different routes or means of access to those states of mind that coexist on the fringes of ordinary consciousness. Thus, examining James's official work for the Society sheds some light on his studies of anesthetics and hallucinogens as well.

By yoking together science and mysticism, James wanted more than to simply use scientific methods to debunk mystical claims. His interest grew from what he perceived

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[10] In the interest of proper classification, I should point out here that these areas of study are not identical (that is, James didn't consider his investigations of automatism, thought-transference, and spiritual mediumship to be the same thing as religious experience, of which he considered his experiments with nitrous oxide to be a part)—however, since both areas of study treat what Eugene Taylor calls "consciousness beyond the margin," and since in both cases James was interested in integrating these modes of inquiry with science, it seems appropriate to talk about them both together.

[11] While the American Society for Psychical Research itself lasted only five years (because, as James pointed out rather accusingly, its members were generally too occupied with other pursuits to do the amount of empirical research on psychic phenomena necessary to sustain the operation), its members regrouped as the American branch of the English Society for Psychical Research, which lasted until 1906, when the SPR finally disbanded. The SPR had two major publications: the annual *Proceedings of the Society for Psychical Research*, which was made available to the general public, and a monthly *Journal* available only to members of the Society that published fragments, cases, and bits of information.

[12] This characterization comes from Tymoczko.

as limitations in both modes of inquiry, and the philosophical issues that undergirded these limitations. In his 1892 essay "What Psychical Research Has Accomplished," for example, James diagnoses an alarming allergy to thought prevalent in both the scientific establishment and in the vast (if unauthorized) body of "mystic" writings. Mysticism's propensity to avoid rigorous examination of its phenomena was an annoying problem; even so, however, James found the mushy-headedness of mysticism to be less egregious than the more subtle and insidious closing-down of thought that pervades ordinary science. "The ideal of every science," James wrote,

> is that of a closed and completed system of truth. The charm of most sciences to their more passive disciples consists in their appearing, in fact, to wear just this ideal form. Each one of our various *ologies* seems to offer a definite head of classification for every possible phenomenon of the sort which it professes to cover; and so far from free is most men's fancy, that, when a consistent and organized scheme of this sort has once been comprehended and assimilated, a different scheme is unimaginable. No alternative, whether to whole or parts, can any longer be conceived as possible. Phenomena unclassifiable within the system are therefore paradoxical absurdities and must be held untrue. (299-300)

The very language of this passage: "closed," "completed," "definite," "assimilated," suggests James's distaste for the logical positivist bent that dominated late nineteenth-century science. Such a mode of inquiry, James argued, characterized as it was by a fearful closed-mindedness and intolerance for irregularity, essentially enclosed the world in a box—a position that had detrimental effects on thought, and by extension, on life

itself. James's critique of the excesses of science here echoes his critiques of neo-Kantian and Hegelian absolutism in philosophy, which by different means tended toward the same closures.

As such, James was always on the lookout for ways to locate and bolster linkages between seemingly incompatible ways of thinking. So though he disapproved of orthodox science's attempts to shut down thought, he did not disapprove of science in general, or even necessarily of the "ordinary empiricism" that he critiques elsewhere in his writings. In fact, James goes out of his way in his address to the scientific community on psychical research to establish himself and his cronies in the Society for Psychical Research as among the hardest-headed of the hard-headed scientists, and tough-minded in the extreme (to an almost comic extent; one wonders if the lady doth protest too much). James characterizes the current head of the Society, Henry Sidgwick, for instance, as an academic known widely as "the most incorrigibly and exasperatingly critical and sceptical mind in England," and speaks approvingly of the other higher-ups in the Society: "the hard-headed Arthur Balfour" and "the hard-headed Prof. J. P. Langley" (*EPR* 299). James's eagerness to persuade the scientific community of the legitimacy of the Society's enterprise speaks to more than just his own desire for credibility in a questionable area of research. Rather, James saw that attending to the ways of knowing implicit in mysticism could make science more truly scientific. That is, an ideal science in James's view would be one that lived up to its name: one characterized less by fruitless attempts to create a closed, rational system, and more by a genuine curiosity toward events and phenomena and an attentive, open-ended style of inquiry. Attending to

mystical phenomena would be one way to practice in this spirit of inquiry. "Repugnant as the mystical style of philosophizing may be," James wrote,

> there is no sort of doubt that it goes with a gift for meeting with certain kinds of phenomenal experience. The writer of these pages has been forced in the past few years to this admission; and he now believes that he who will pay attention to facts of the sort dear to mystics, while reflecting upon them in academic-scientific ways, will be in the best possible position to help philosophy. (*EPR* 302-303)

Though this passage contains just enough skepticism of mystical phenomena to bolster his ethos with his scientific audience, the problem as James saw it was not with the particular style of thought, but with the limitations entailed by clinging too firmly (and fearfully) to one mode of inquiry or the other.

Living with the pluralistic nature of experience—holding the system open and attending to new possibilities—has practical boons for science as well, James argued, in a formulation that anticipates Thomas Kuhn's theory of the paradigm shift in *The Structure of Scientific Revolutions*:

> Only the born geniuses let themselves be worried and fascinated by these outstanding exceptions, and get no peace till they are brought into the fold. Your Galileos, Galvanis, Fresnels, Purkinjes, and Darwins are always getting confounded and troubled by insignificant things. Any one will renovate his science who will steadily look after the irregular phenomena. (*EPR* 300)

Attending to the apparent "irregularities" constituted by mystical and psychical phenomena creates a livelier, more robust science as well. Likewise, James wanted mysticism to be more than simply tolerated. Rather than simply clearing a bit of space in hard-headed, stodgy old science for psychical and mystical phenomena, James also wanted to account for them scientifically or empirically. That is, he was genuinely interested in not only improving science by opening it up to areas which it ordinarily left untouched, but also in subjecting mystical and paranormal phenomena to scientific experiment. Necessary for such an endeavor was a close attention to the different ways that what James dubs (not unproblematically) the "scientific-academic mind" and the "feminine-mystical mind" encounter the world:

> Facts are there only for those who have a mental affinity with them. When once they are indisputably ascertained and admitted, the academic and critical minds are by far the best fitted ones to interpret and discuss them, —for surely to pass from mystical to scientific speculations is like passing from lunacy to sanity; but on the other hand if there is anything which human history demonstrates, it is the extreme slowness with which the ordinary academic and critical mind acknowledges facts to exist which present themselves as wild facts, with no stall or pigeon-hole, or as facts which threaten to break up the accepted system. (*EPR* 302)

The difference in the two types of minds (whether or not one agrees with James's insistence on discerning only two types of minds) is less a matter of correctness, then, than a matter of speed and affinities. Mystic minds are fast generators of "wild facts," careening carelessly up against the walls of carefully established systems of knowledge

and thought, while academic minds are slow, patiently grinding out analyses and resultant theories. Both ways of knowing, James suggests, are necessary for an honest, encompassing and rigorous approach to experience. It was with such intellectual investments that James approached the study of the subjective effects of nitrous oxide and other drugs.

## The Rhetorical Economy of the Self-Experiment

Drugs in nineteenth-century America—alcohol, naturally, but also opiates, ether, cocaine, and other substances—had been used extensively for both recreational and medical purposes, and they had been studied for their medically advantageous properties. Nitrous oxide gas, first isolated by Joseph Priestley in 1793, was subjected to some experimentation for anesthetic purposes in the early 1800s by Humphrey Davy (who dubbed it "laughing gas" after observing its effects on unsuspecting volunteers). Though nitrous oxide enjoyed a long vogue as a recreational drug in carnivals and public shows in the first half of the century, after 1863 it was used primarily as a dental anesthetic, made popular when medical school dropout Gardner Quincy Colton and a partner opened a series of dental institutes that used nitrous oxide as an anesthetic.

James first became alerted to the psychedelic properties of nitrous oxide in the early 1870s when he received a small pamphlet entitled *The Anaesthetic Revelation and the Gist of Philosophy* from Benjamin Paul Blood, an amateur philosopher from Amsterdam, New York, who painted himself in a later letter to James as "an idle, indifferent, and amateur fraud"(*Correspondence* 44). Dmitri Tymoczko (perhaps a bit unkindly) characterizes Blood as "the very picture of the half-baked American eccentric,

a snake-oil salesman with philosophical pretensions. Born in the wrong place and at the wrong time, he knew too little to put his talents to good use, and too much to let them atrophy gracefully"(95). Nonetheless, James (who was famous for adopting what F.C.S. Schiller later teasingly described as "pet cranks") was intrigued enough by Blood's pamphlet to write a review of it for *The Atlantic Monthly* in 1874, thereby cementing Blood's position as a minor but significant influence on the course of American philosophy. In the process, James and Blood struck up an epistolary friendship that spanned the length of James's career. Amateur though it was, Blood's work had a strange power over James, who later wrote of *The Anaesthetic Revelation*, "I forget how it fell into my hands, but it fascinated me so 'weirdly' that I am conscious of it having been one of the stepping-stones of my thinking ever since"(173). Indeed, James's last publication before his death in 1910 was an encomium to Blood called "A Pluralistic Mystic," in which he said "Let *my* last word, then, speaking in the name of intellectual philosophy be *his* word" (190), thus ending his final piece of published writing with a quotation from Blood.

In his review of *The Anaesthetic Revelation*, however, James initially seems rather skeptical of Blood's claims:

> More indeed than visionary,—crack brained, will be the verdict of most readers when they hear that he has found a mystical substitute for the answer which philosophy seeks; and that this substitute is the sort of ontological intuition, beyond the power of words to tell of, which one experiences while taking nitrous oxide gas and other anaesthetics. (628)

One can hear a "but" in James's disclaimer, however—even in the early years of his career, James revealed his openness to a plurality of views and ways of knowing. While he maintained that "we are more than skeptical of the importance of Mr. Blood's discovery," he also cautioned readers not to dismiss it too quickly: "we shall not howl with the wolves or join the multitude in jeering at it….[W]hen a man comes forward with a mystical experience of his own, the duty of the intellect towards it is not suppression but interpretation"(628). Indeed, James's experiments with nitrous oxide and other drugs (including ether, amyl nitrate, chloral, and mescaline) subsequent to reading Blood's pamphlet belied his apparent dismissal.

That James treated taking drugs scientifically can be seen both in the way he approached the event and in what he did with the results. After inhaling the gas, James, ever the patient philosopher-scientist, sat with a pen and notepad to record the results. Not surprisingly given the circumstances of the experiment, James was unable to produce a coherent discourse about what he experienced. Instead, what he recorded was "a torrential character of the identification of opposites as it streams through the mind," the phrases that resulted being not a discursive production of knowledge *about* the experience, but essentially the products *of* the experience:

> Reconciliation of opposites; sober, drunk, all the same!
>
> Good and evil reconciled in a laugh!
>
> It escapes, it escapes!
>
> But—
>
> What escapes, WHAT escapes?

> Emphasis, EMphasis; there must be some emphasis in order for there to be a phasis.
>
> No verbiage can give it, because the verbiage is other.
>
> Incoherent, coherent—same.
>
> And it fades! And it's infinite! AND it's infinite!
>
> If it wasn't going, why should you hold onto it? (296-297)

The results of James's self-experiment, the material record of his work, thus appear to be not much more than nonsensical scribblings that nonetheless hint at some profundity, the impossibility of adequately representing the experience captured especially by the phrase, "it escapes, it escapes!" and a later one, "It fades forever and ever as we move." So if James's self-experiment were to be judged by traditional scientific standards of reproducibility and replicability—the economy through which "reliable" scientific knowledge circulates—it would have to be counted as a failure.

But if we take into consideration the kind of knowledge that was produced, repeated, and distributed amongst James's colleagues, we might have a different idea of the "success" of the experiment. While traditional scientific norms of knowledge production might count James's self-experiments as a failure, owing to the very nature of what the experiment is being performed on (i.e., the self), if one takes as a measure of success the experiment's rate of repetition by other scientists, then James's was a success indeed. Through his repeated injunctions for others to multiply the experiments/experiences with nitrous oxide in his publications on the subject, James amalgamated a small collection of reports on nitrous oxide (whether deliberate self-experiments or recollected from startling "revelations" that came during tooth extractions

and other dental procedures), other scientists, philosophers, and spiritualists, among them Edmund Gurney, Xenos Clark, William Ramsay, and J.A. Symonds, seduced by the idea of a transformation or revelation of ordinary consciousness, also experimented with nitrous oxide and other drugs and published their own accounts (or sent them to James, who published them).

Radically different from traditional forms of experiment, testing psychedelics meant submitting oneself to self-experiments—to the absolutely unknown, the limit experience of otherness—in order to study the self. As with any scientific experiment worthy of the name, one cannot know in advance what the results will be. But self-experiments, as James's experience proves, are particularly vexed enterprises from the point of view of orthodox science, because the very subject that is supposed to be objectively observing and recording the data is the same subject that is being altered by the experiment.

Richard Doyle discusses this rhetorical quandary as it was experienced by Albert Hoffmann, the 1938 inventor of LSD-25. Doyle makes a prepositional distinction between modes of self-experiment: experiments *with* the self and experiments *on* the self. Experiments *with* the self, Doyle says, provide an outcome that traditional scientific standards would hold as meaningless, because the self under an altered consciousness cannot be trusted to gather reliable data and generate a report: "As an assay, the self is found wanting [under the aegis of orthodox science]," Doyle says. "If the experiment is an occasion at which, strangely, the self is to be present as the very apparatus through which the inquiry is to be made visible and replicable, then the apparatus has faltered and the experiment is nothing but artifact" (163).

This alternate rhetorical economy of scientific production is a feature of psychedelic self-experiments that still held true more than half a century later with Hoffman's discovery of LSD. Doyle distinguishes this rhetorical aspect of self-experiment in Hoffman as an experiment not *with* the self, but *on* it: "It is as an experiment *on* the self that Hoffmann's discoveries are replicated by the community. Only by encountering a veritable undoing of the self—a submission to the possible transformation that one is in fact testing for—can interesting data from this novel pharmacological agent be gathered, evaluated, and transmitted" (164-165).

The most common characteristic of accounts of nitrous oxide experiences is their description of ineffability, or the inability to adequately represent the experience so that others might understand it intellectually. Account after account begs pardon for the impossibility of adequately describing the insights that came to the nitrous oxide inhaler. In a note to James about an experience at the dentist's, Edmund Gurney (a member of the *Society for Psychical Research*) describes the difficulty he had in summoning up enough will to write down the experience, in which he said was revealed an "observation of great psychological interest as to the way one reckons time" (*Correspondence* 6 134). In *The Anaesthetic Revelation* (the first piece of writing to discuss nitrous oxide and self-experiment in such a way, Blood writes,

> By the Anaesthetic Revelation I mean a certain survived condition, (or uncondition) in which is the satisfaction of philosophy by an appreciation of the genius of being, which appreciation cannot be brought out of that condition into the normal sanity of sense—cannot be formally remembered, but remains informal, forgotten, until we return to it.

The experiences of the self under nitrous oxide share the characteristics with other experiences that James described as mystical, the most definitive quality of a mystic experience being its ineffability. The revelations of mystical experience cannot be expressed; they are a limit experience of the Other that overwhelms the ability to create a discursive representation of a lived experience. As such, they put us in a different relation to the world. Given James's interest in and desire to repeat such experiences, his inability to believe in the doctrine of intellectualism (which places the human intellect and rationality above the world) and his embrace of a pluralistic philosophy is unsurprising.

That is, the beauty of the experiment *on* the self in terms of scientific inquiry (and one that meshed well with James's philosophy of pluralism) was that one cannot possibly know in advance what any given experiment would produce. It could be a transformation of the Self, an opening of one or another of the many fields of consciousness that James claimed remained outside the purview of ordinary or habitual perception, or it could produce a much more prosaic bodily reaction, as James discovered when he experimented with peyote, a drug that was perhaps a bit too strong for James's nineteenth-century-Harvard constitution. "I have just been having an amusing experiment in seeking truth by intoxication," James wrote to Blood:

> Weir Mitchell wrote me he had from the U.S. Gov. a supply of 'mescal' for experimental purposes. M. is a cactus used by some of our South Western indians for narcotic purposes in certain religious ceremonies. Mitchell and others had taken it and found the most gorgeous stimulation of the visual centres, magnificently colored hallucinations, pure fairyland

> pictures such as earth cannot afford, etc. I took a small dose at 6:30 a.m. and had nothing but nausea & diarrhoea till 4 the following a.m., when I remember I vomited for the last time. Not a flicker of light or colour, not a twinge of rationality, only loathsome sickness the whole time. Should you like me to send you some? It might affect *you* less strongly in that way! (*Correspondence* 6 157-158)

James's experience with mescal colorfully demonstrates the itinerant nature of self-experiment. Since it is impossible to know or even guess ahead of time what a particular dosage of a particular drug interacting with one's bodily chemistry and mental state on a given day will produce, the only thing that one can do is go through the experiment and remain open to its effects.

Obviously the very act of reporting produces some description of the event of drug taking; but what's curious about these reports is that all of them state the impossibility of adequately describing the experience. Because the experience of taking nitrous oxide was subjective (like all experience), the most effective way to convey a sense of its force would be to persuade others to undergo the experience themselves. Thus, a rhetorical economy different from that of ordinary scientific production of the logical positivist ilk is produced. This rhetorical economy is characterized, ironically, by a failure of communication: the experiment cannot be described! But it is this very ineffability associated with the self-experiments, combined with an ostensible *alteration* of self that stimulates curiosity, intriguing others enough that they repeat the experiments, even without knowing what the experiment itself will produce. In essence, James helped to create a community of scientists, all working separately to repeat the subjective

experiments in an attempt to undo or gain a better understanding of the nature of the Self. The scientific rhetoric of the self-experiment works here in an economy of contagion rather than through the dictates of recordability and repeatability that characterize "normal" scientific discourse. Others are persuaded to replicate self-experiments with nitrous oxide not *despite* the apparent gibberish that James produced under its influence, but *because* of it. Ironically, it was the very ineffability of the experience with the drug, the rhetorical "failure" of the experiment that created the desire for more experimentation.

## Ecology Manifesting: The "Accidental Fences" of Self

If the anaesthetic revelation lives up to its name, then what exactly does it reveal? Blood and James continued to mull over this question for decades after James's initial review of Blood's pamphlet appeared. Despite the apparent ineffability of this mystic experience, James's self-experiments had profound effects on him, and served to defamiliarize the very object of the experiment—namely, the self. These self-experiments not only performed the type of open-ended inquiry that James's philosophy of pluralism called for, but they also provided striking insights into consciousness and the nature of the self as a habit, a limiting of the field of consciousness that hides or effaces its inextricable enmeshment with all other things.

In *Varieties of Religious Experience*, James recalls the knowledge that was produced through the inhalation of nitrous oxide. He says, "One conclusion was forced upon my mind at that time, and my impression of its truth has ever since remained unshaken. It is that our normal waking consciousness, rational consciousness as we call

it, is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different…." (*VRE* 378). That is, what we call the "I" or the self is not something that represents the actual truth of our being; rather, it more accurately can be described as a habitual set of responses to the world.

In a letter to James responding some time after the fact to James's review, Blood continues his attempts to capture or describe the mystery of self in the anaesthetic revelation, which, after all, is *the* mystery:

> We cannot get behind ourselves—cannot see ourselves because we become the self in the effort to see and a new view is necessary and ever too late. –Hundreds of such whims haunt my efforts to tell what is the Anesthetic—revelation? Is it revelation? A secret? Or lack of one—we being used to mystery as our dayly life? […] All we know just prevents us knowing this mystery. Sanity saves us from it perhaps. (*Correspondence* 5 231).

Blood's struggle to convey the meaning of the experience in the rational language of narrative makes it apparent that the anaesthetic revelation trumps rational understanding and easy narrative explanation. Indeed, as holds true for other experiences that James designates as "mystical" in *Varieties of Religious Experience*, what seems to be the defining characteristic of the anaesthetic revelation is the impossibility of conveying it to another's understanding through ordinary discursive modes of communication. The revelation is something that can be *seen* or experienced corporeally, hence Blood's confusion about what to call his experience: a "revelation" implies through its language

that something is revealed through sight, and yet eludes sight at the same time: "We […] cannot see ourselves because we become the self in the effort to see and a new view is necessary," Blood says. As Blood's language in attempting to assess his experience brings to attention, it becomes difficult to even say what the self is, where it resides: "We cannot get behind ourselves": Blood's interesting prepositional use here reveals a strange self doubling—who is the "we" here, and what is the Self that it is trying to get behind? Blood's futile attempts to indicate even a locus of agency for the experience reveals the impossibility of formulating a Self to recognize the experience. That is, it's impossible to ascertain or grasp or fathom or understand the anaesthetic revelation (or secret or lack thereof), because to do so would involve an attempt to dredge up a Self that the anaesthetic revelation itself has obliterated. The revelation of the mystery is itself a form of Self-obliteration, an opening up of the consciousness and the self to the irrevocably Other force of life—what Blood calls the "*old* mystery, the hairy primogene," and as such cannot be grasped by the self because what the anaesthetic revelation does is precisely to get rid of the Self—thus, the Mystery that Blood perceives necessarily eludes any attempts to formulate a representation of it in rational or waking consciousness. "A new view is necessary and ever too late—. " Sanity, or what one might think of as the "normal" waking consciousness, is a protection from the sense of No Self, which after all constitutes what is revelatory about the anaesthetic revelation.

The familiar, habitual sense of being an "I" thus both limits our view and shields us from a massive dispersion, a double movement that can be glimpsed or intuited most purely through psychical and mystical experience. In one of his last essays as a "psychical researcher," James muses on what is hidden by the self:

> Out of my experience…one fixed conclusion dogmatically emerges, and that is this, that we with our lives are like islands in the sea, or like trees in the forest. The maple and the pine may whisper to each other with their leaves, and Conanicut and Newport hear each other's fog-horns. But the trees also commingle their roots in the darkness underground, and the islands also hang together through the ocean's bottom. Just so there is a continuum of cosmic consciousness, against which our individuality builds but accidental fences, and into which our several minds plunge as into a mother-sea or reservoir. Our 'normal' consciousness is circumscribed for adaptation to our external earthly environment, but the fence is weak in spots, and fitful influences from beyond leak in, showing the otherwise unverifiable common connexion. (*EPR* 374)

The self is here only created by a barrier or a fold in the massive continuum of consciousness, protected from overwhelming distribution and interconnectedness by little more than the flimsy fence of the ego. What seems most striking about this passage is James's profoundly ecological sense of self—that is, while we may be accustomed to considering our Self as separated or removed from its surroundings, James would argue that this feeling of separation is really only the result of habit, the type of consciousness to which we are accustomed. So what's required here is to understand not just how habit limits our relationship to this "cosmic continuum," but also to develop practices for blocking or what James calls "jamming" this habitual self, in order to teach or persuade it to remain more openly in the ecology in which it is entangled and immersed. The etymology of the term "mystic," after all, from the Latin *mystes* means "to close the lips

or eyes." What is required is the blockage or closing off of the habitual Self in order to make way for difference or transformation; for a more open, responsive, and ethical relation to the world.

In short, what one learns from James is that habit is a powerful force, one that can help us attune to the world, but one that often can and does serve as a limiting factor in the ways we approach the world. Thus, habit, as its etymological relations indicate, is intimately related with ethics, in the most basic sense the relationship between self and world. But what William James teaches us is how to develop an ethical *style* of relation to the world, one that knows itself to be inextricably bound up with others (others including humans, animals, and inanimate objects) in an ecology—self being the "accidental fence" that prevents us from seeing our absolute imbrication and entanglement in this ecology.

# Chapter 4

## John Watson's Behaviorism: Kicking the Suicide Habit (With the Perfect Consumer Body)

Among John Broadus Watson's papers in the Library of Congress is the unpublished manuscript of an article called "Why I Don't Commit Suicide," undated but most likely written in late 1932 or 1933, toward the end of Watson's career as the founder of behaviorist psychology *cum* self-appointed dispenser of child-rearing advice and advertising executive. Given the "I" and "Don't" of the title, one might expect the essay to read as a touching affirmation of an individual life, Watson's own personal catalogue of reasons and strategies for living through difficult times. But despite its evocation of the personal, the essay actually turns out to have quite different aims: namely, to diagnose and remediate the wave of suicides that appeared to be cresting in the 1930s. According to "Why I Don't Commit Suicide," suicide was thirteenth among causes of deaths in 1931 and showed no signs of abating. Watson was deeply troubled by this increase in Depression-era suicide rates, particularly with his discovery of two disturbing facts: one, that the suicide rates had been climbing not just since the stock market crash of 1929, but had been "gone steadily upward now for almost a decade" ("Suicide" 2) and had been high even in the prosperous years before Black Friday.

Second, the highest increase in suicides occurred in people from the ages of 25-44, or "in the early prime of life, and before the onset of old age" ("Suicide" 2). Why, Watson wondered, would people with so much ahead of them commit such an irreversible act? Moreover, because suicide was an act of will (perhaps the ultimate act of will), Watson saw it as inherently preventable; the fact that it was not being sufficiently prevented revealed flaws in the social fabric, and hence the problem was something that could be examined through a behaviorist lens and perhaps solved.

"Why I Don't Commit Suicide" creates a narrative of a shift taking place in society, and attempts to diagnose and account for the reasons for suicide among young people within this shift. In part Watson attributes this societal shift to the influence of behaviorism, which was significant, if such a thing can be indicated by the number of 1920s newspaper and magazine articles and radio programs that discuss the topic. Behaviorism's emphasis on freeing individuals from the "infantilism" that resulted from leftover emotional habits, according to Watson, had been a deciding factor in the "liberation" of young people from the strictures of traditional institutions:

> We have in the past few decades been building a different kind of youth. Behaviorism has done what it could to further the youth movement. It has been the friend of youth—demanding that he be freed from the traditional bondage of the home—from undue attachments to parents—and that he be taught to face himself, his own weaknesses—freed from self adulation, self pity, and dependencies of social heritage. We have tried to teach him to find himself in battling with and overcoming his environment. ("Suicide" 2-3)

From the language used in the passage, it seems clear that Watson is thinking of causes that go beyond the Depression. Watson locates the responsibility and the cure for the high rate of suicide neither in the individual nor to society. Instead he attributes the suicide problem to a failure of behaviorism itself, a failure of the anonymous medical and psychological "we." The unspecified "we" of the passage (by which Watson presumably means behaviorists) is an all-controlling collaborative subject: "we" build youths, "we" liberate them from the strictures of institutions, "we" help them overcome the vicissitudes and difficulties of their environment. The problem for Watson is created by a gap or failure in the mechanisms of control on the other end—that is, while behaviorism can ostensibly control the actions of individuals, particularly when they are young and pliable, it has failed to recognize the need to also control those aspects of the system not necessarily associated with individuals and their habits and behaviors: "We haven't changed the world to receive these new intellectuals."

For a biopolitics that produces and values control, suicide represents the ultimate loss of control, an individual act of will that removes the individual from the fine modulations of the biomedical/psychiatric power that Gilles Deleuze has characterized as the hallmark of "control society." The achievement of such success, however, and the interest in more finely meshing the mechanisms of power directly with the desires of the individual, rather than exercising them indirectly through state and institutional means was not something that could have happened all at once. In fact, though "Why I Don't Commit Suicide" acts as a moment of public recognition on Watson's part of the investment in behaviorist psychology in control, a massive mechanism of rhetorical and material forces needed to have first been established and mobilized. One such trope that

this mechanism relied upon was the conception of the human organism (which was, in behaviorist psychology, no different from the non-human organism) as an "organic machine"—a collection of habits, a set of visible behaviors or what I call "corporeal surfaces" on which the operations of power were able to work. In Watson's work, we see the recognition that habit, because of its regulated (repetitive) and therefore visible nature, can be used not only as a way for human transformation, as was the case in William James and Samuel Butler, but as a viable surface for various factions to gain control. Indeed, an interest in such control could be seen from the very beginnings, when John B. Watson was just distinguishing his program of experimental psychology from its predecessors, most notably the psychology of James.

This chapter first maps out Watson's early attempts to redefine psychology as the study of behavioral surfaces. It then examines the rhetorical traces and echoes of Watson's definition through his shift in interest to children and child-rearing (the control of the most basic social unit) and the application of what Watson learned about the force of habit to the control of consumer desires, a legacy of behaviorism that can be seen in contemporary marketing tactics: retail anthropology, branding, and neural marketing among them. While habit in Darwin, James, and Butler offered possibilities for a creative transformation of the Self, an opening of the human to profound interconnection with all other organic and inorganic forces and a recognition that the organizing Self itself was nothing but a habit regulating a collection of habits, Watson's behaviorist psychology used these same principles (including habit as a force of forgetting) to reconfigure the body as something produced by and responsive to flows of capital and desire.

## The Behaviorist Manifesto: Flattening Psychology's "Black Box"

At the turn of the twentieth century, psychology, then in its disciplinary adolescence, experienced something of an identity crisis that called into question even the most basic elements of its existence. Was it a natural science or a social science? What were its established or standard methods for study? And even more basically, what was one studying when one studied psychology? Traditionally for psychologists, the object of psychological study was consciousness: how it worked, its qualities, and its effects. But for the more experimentally or empirically inclined, consciousness was an unsatisfactory object of study, simply because there was no way to quantify or verify it.

For a time, experimentalists satisfied their empirical inclinations by studying the psychological processes of animals; because animals theoretically didn't have the complications of consciousness, the empirical problem was reduced to a manageable level. But the gap between human and animal psychology continued to widen in terms of institutional respect and resources, until Watson, who wanted to study learning processes in humans as he had studied them in white rats, sooty terns, and other animals rhetorically sidestepped the problem of the ostensibly unknowable consciousness by simply declaring it irrelevant. In a 1913 article that appropriately came to be known as the "behaviorist manifesto," Watson grandly announced that psychology's traditional *modus operandi* had become obsolete: "The time seems to have come when psychology must discard all reference to consciousness; when it need no longer delude itself into thinking that it is making mental states the object of observation ("Psychology as the Behaviorist Views It" 163). As Watson saw it, the problem with consciousness was not a

matter of whether it existed, but that it could not be verified empirically, and that traditional psychologists like (who he labeled the "introspectionists") had frittered away countless hours and pages attempting to catalogue such immeasurable manifestations of consciousness as sensation, the quality and duration of affective states, perception, etc.

By contrast, Watson's vision for psychology was for it to become a science on the level of physics and biology; he wanted most to rid psychology of what he saw as its old religious and metaphysical underpinnings, to close off the murky depths into which it had been peering, and to bring psychological processes into the clear light of the scientific gaze. He did so by shifting the emphasis of psychology: "The psychology which I should attempt to build up would take as a starting point, first, the observable fact that organisms, man and animal alike, do adjust themselves to their environment by means of hereditary and habit equipments…secondly, that certain stimuli lead the organisms to make the responses" ("Psychology as the Behaviorist Views It" 167). Thus, whereas introspectionist psychology by virtue of its interest in consciousness focused primarily on attempting to understand the individual qua individual, Watson instead places the study of individuals in the context of their environment, a shift in focus that had profound effects on the way he approached psychology. In a follow-up article to his "behaviorist manifesto," Watson makes clear that this new brand of psychology was not simply interested in observation, but in control: "what we seek to have psychology busy herself with is just this matter of *environmental adjustment*; what can man do apart from his training; what can he be trained to do, and what are the best methods for training; and finally, how, when the varied systems of instincts and habits have sufficiently developed, can we arrange the conditions for calling out appropriate action upon demand"("Scope"

336)? Watson's behaviorism was in essence a science of surfaces, thus in theory making the entire organism available to the eyes of the psychologist. Consciousness could do what it liked; as for Watson, he would turn his own gaze to that which could be clearly seen, measured, predicted, and controlled—that is, habit and behavior. In the best pragmatic fashion, he wanted to ascertain what one could *do* with such knowledge, specifically how one could learn to predict and control behavior, an interest reflected in the next instantiation of his professional life, his career as an advertising executive.

Introspective psychology, especially that advocated by James and E.B. Titchener, thus served as a convenient straw man for Watson, who deemed it inherently unscientific in its devotion to consciousness. He writes, "You must remember that the nervous system to the introspectionist has always been a mystery box—whatever he couldn't explain in 'mental' terms he pushed over into the brain" (49). It was the ostensibly unempirical nature of introspectionist psychology's devotion to consciousness that most infuriated Watson. Since an individual's state of consciousness could never be precisely quantified or measured by an outside observer, introspectionists had to rely on the individual under study who was experiencing a given affect, image, or sensation to provide them with a description of its qualities. Introspectionists disagreed over the precision and the number of criteria that could be used to describe a state of consciousness; so, for example, one introspectionist might have twenty categories for describing the sensation of red, while another might have only seven. Because there was no standardized way to measure consciousness in individuals, Watson argued, introspectionist psychology made itself irrelevant from a scientific standpoint.

But because the introspective method had so much cache in early twentieth century psychology, those who wanted to study how organisms behaved still felt compelled to guess at the states of consciousness that accompanied given behaviors, a method that Watson found frustratingly redundant: "One can assume either the presence or the absence of consciousness anywhere in the phylogenetic scale without affecting the problems of behavior one jot or one tittle; and without influencing in any way the mode of experimental attack upon them"("Psychology as the Behaviorist Views It" 161). Under the introspectionist rubric, one could not study behavior directly, but only by analogy—that is, through the comparison of two things (consciousness and action) that were irreducibly different. Because of the irreducible difference of the two things being related, all analogies contain a gap or slippage. In terms of studying behavior with the introspective method, there remains an excess of mental processes that cannot possibly be revealed by the physical signs of behavior. In the introspectionist formulation of problems, the mental or internal state being guessed at is always privileged over the physical signs of behavior; it is the ungraspable thing that scurries on ahead of the observer, just out of reach. Anyone interested in studying an organism's behavior under the paradigm of introspection would be stymied in their attempts to empirically verify states of consciousness because of the impossibility of having full access to another's subjective experience.

But Watson also spied a more insidious (and unscientific) purpose in introspectionist methods. In a follow-up article to his "behaviorist manifesto," he accuses the introspectionists of attempting to smuggle religion in the back door:

> When the psychologist threw away the soul he compromised with his conscience by setting up a 'mind' which was to remain always hidden and difficult of access. The transfer from periphery to cortex has been the incentive for driving psychology into vain and fruitless searches of the unknown and unknowable ("Image and Affection" 424).

Since the introspectionists rely upon subjective description of states of consciousness, the human mind can never be made fully or adequately knowable to an observer, and a mysterious element (whether it's called the soul or consciousness) always remains unavailable to the scientific grasp. Watson used this remainder as the primary target for his attacks on the introspectionist method—because mental processes cannot be fully or adequately revealed by the physical signs of behavior, he argued, the introspectionists were cleverly foiled by their own method and as a result managed to stash in the depths of the psyche, away from the sharp eyes of science, a small bit of mystery. Introspectionists were thus unable to avoid, as could the physical scientists of the Renaissance, "to leave soul out of their test tubes"(Behaviorism 3).

Against his characterization of the introspectionists' subtly religious program and their dark, unknowable version of mind, Watson pits his own brand of psychology, one that ostensibly avoids the problem of hidden depths in which something like a soul might hide. In behaviorism, the object of study (i.e. the organism) is entirely composed of surfaces, which can be observed, catalogued, predicted, and ultimately controlled. In place of the subjective introspectionist method, Watson states in the opening paragraph of his "manifesto" that "Psychology as the behaviorist views it is a purely objective experimental branch of natural science. Its theoretical goal is the prediction and control

of behavior"(158). Under the introspectionist program, the object of the psychologist's study remains out of his control, owing to the impossibility of fully accessing another's mind. Watson's reformulation of the scope and purpose of psychology as the study of behavior places the psychologist firmly back in control. Since the behaviorist's interest lies only in what the habits and patterns of an individual's behavior reveal, he can regard the patient or object of study purely as an object. That is, when the psychologist only considers behavior to the exclusion of its accompanying mental processes or states of consciousness, the individual becomes fully revealed in the light of the psychologist's gaze, and hence becomes conducive to the production of knowledge.

Despite Watson's protestations to the contrary, an article that came out later that year proved that consciousness was less willing to disappear than it may have seemed at first. To differentiate between the introspectionist and behaviorist approaches to studying human psychology, Watson uses the example of a man faced with a difficult decision. The man, who is given two days to decide if he should borrow $1000 to go abroad for the year, is hypothetically studied by an introspectionist and a behaviorist:

> Now the train of thoughts going on in my mind, according to the upholders of the image [i.e., the introspectionists], has no adequate behavior counterpart while it is in transit. The behaviorist, observing me, might note that my appetite had departed, that I was smoking and drinking more than usual, and that I was distrait. Finally, experimental tests might show that my ability to make fine coordination had been seriously interfered with, that my dynamometric threshold was lowered, and so *ad infinitum*. The introspectionists would say that all of these tests failed to

> give anything like a complete record of my mental conduct' or of the 'totality of conscious processes.' ("Image and Affection" 422)

The difference between the introspectionist and the behaviorist initially appears to be pragmatic—the introspectionist in Watson's characterization is dissatisfied with simply observing what the person under stress does, and instead wants to uncover the hidden and ultimately uncategorizable processes taking place beneath the surface of his actions. The behaviorist, on the other hand, decides that the actions of the individual are revealing enough:

> [The] behaviorist must content himself with this reflection: 'I care not what goes on in his so-called mind; the important thing is, given the stimulation (in this case a series of spoken words) it must produce response, or else modify responses which have been already initiated. This is the all-important thing and I will be content with it.' In other words, he contents himself with observing the initial object (stimulation) and the end object (the reaction). ("Image and Affection" 422)

Though the *content* of this passage describes (in the best positivist fashion) how affect might be eliminated from an empirical, clinical observation of a subject's behavior, the affective *language* used to describe the behaviorist's reaction to the situation belies Watson's purpose. It also serves synecdochally to reveal the conflicts of the entire behaviorist project. The behaviorist doing the observation "must content himself" with clinically and detachedly observing the subject's behavior; he must say, "I care not" about consciousness, that "I will be content" with the external signs of the individual's behavior. This subtle rhetorical shift undermines Watson's attempts to make

consciousness irrelevant; by declaring that the behaviorist does not care if consciousness or underlying mental processes are there or not, Watson leaves the idea of consciousness untouched. It also subtly indicates the repressed element in the system (namely, affect), an element that, true to Freud's characterization of things that have been repressed, does what it does best: returns. Affect is a component of the behaviorist agenda that persistently dogs behaviorism's footsteps, despite Watson's best intentions for a rigidly positivist psychology.

At first glance, the simplicity of Watson's behaviorist agenda for psychology appears to be an elegant solution to the problem of the unscientific nature of the introspectionists. In Watson's formulation, the surfaces of behavior and the depths of consciousness are collapsed, a magical disappearing act that leaves the organism transparent to the eye of the behaviorist. This collapsing would appear to create a system that flattens out the relations between subject and object, the observer and the observed. But whereas under introspectionist psychology the object was inflated or privileged because it was the only thing that had access to its own states of consciousness, in Watson's reformulation the observer-psychologist has the privileged position; all is made available to his gaze, but he himself is not available to it; he is the factor that cannot be accounted for under his own system. The soul has been extracted from the depths of consciousness and installed in the form of the psychologist, who now replaces consciousness as the dark, hidden factor in the system.

## Corporeal Surfaces: Habit, Forgetting, Control

While the introspectionists in Watson's characterization paid their respects to what, in the end, they considered to be the un-measurable (and hence, empirically at least, unknowable) properties of memory, thought, and consciousness, Watson scorned the idea that something like an individual's thought processes was fundamentally different from, say, the way he walked or her habit of brushing her teeth before breakfast.[13] For instance, memory—ostensibly (at least in Watson's characterization) for the introspectionists a faculty or property of an already-constituted subject—is for Watson a simple matter of habit and loss of habit. In other words, memory is entirely corporeal: "The behaviorists now affirm that *there is no faculty or process of memory*—there is only *learning*, and *loss* in skill which comes from lack of practice" ("Memory" 244; emphasis in original). Watson describes the body not as a holistic or singular entity, but as a series of individual components or units that organize themselves into systems according to the activities the body regularly performs. When the body ceases to regularly perform a certain activity, whether backgammon, carpentry, or lecturing to college students, the corporeal and neurological organization disintegrates slightly through lack of use and rearranges itself to best accommodate subsequent habitual activities. There is something reminiscent of cybernetics in Watson's description of a body that is continually self-modulating in response to the organism's engagement with its environment. Though the term "cybernetic" wouldn't be coined until 1947, with the publication of Norbert Wiener's book *Cybernetics: or Control and Communication in the Animal and Machine*,

[13] Of course, this characterization of the introspectionists, especially James, is based on a fundamental misreading of James by Watson, who perhaps wishes James to differentiate consciousness and thought from more material entities. However, in *Essays in Radical Empiricism*, James also says quite explicitly that "consciousness" is simply another element of sensory, corporeal existence: namely, the breath (37).

the machinic body described anecdotally by Watson is remarkably similar to Wiener's scientific definition of the animal body as a homeostatic feedback mechanism: "The physical functioning of the living individual and the operation of some of the newer communication machines are precisely parallel in their analogous attempts to control entropy through feedback" ("Human" 27). Though Watson, in his folksier moments, asked his audiences (usually composed of businessmen and other advertising executives) to imagine the human as an automobile about which one could, through observation, produce a narrative, his conception of the body as a collection of elementary components being continually organized through response to the environment and falling into disorganization through disuse anticipates in many ways Wiener's cybernetic model of the body, and remarkably echoes Lamarckian conceptions of the body that resonate through Darwin and James. The cybernetic body operates via a homeostatic mechanism, which is an aggregate of other, smaller, mechanisms, designed to maintain an optimal internal environment for the organism. These smaller mechanisms, like Watson's habit-driven body, respond continually to factors in the organism's external environment, balancing, regulating and adjusting in order to maintain a steady internal state. As Watson describes it, the cybernetic system of the individual organism's body (glandular systems, etc.) mirrors the organism's relation to the larger social body:

> The fact that social values (group *mores*) change puts ever new burdens upon the psychologist because every change in the mores means a different situation to which man has to respond by a different combination of acts, and any new set of acts must be incorporated into and integrated with the rest of the action systems of the individual. ("Scope" 340)

The psychologist is thus put into the powerful position of intermediary between the individual and society, managing reactions, helping individuals to keep in step with changes in social structures: "It is part of the function of the psychologist to tell whether a given individual has the reaction possibilities within him to meet the standards of that cultural age, and the most rapid way of bringing him to act in accordance with them" ("Scope" 340).

Habit is not therefore a property of the body as a whole, but is the arrangement of individual components into a self-organizing system—in other words, the body is composed entirely of habits (again, a characterization that echoes James). Thus, memory loss, for example, is not some mysterious decay of an innate faculty of consciousness, but simply the necessary result of the body reorganizing its systems. For instance, a professional tennis player who suddenly changes careers in order to become a blacksmith undergoes a reorganization of his corporeal habits that makes it difficult to go back to tennis playing:

> The pounding of the iron on the anvil with the heavy sledge hammer calls for the use of other combinations, to be sure, of those same muscles used in playing tennis. Blacksmithing thickens the muscles and sets and stiffens them. It hardens the tendons. They lose their flexibility and suppleness. Age helps in the hardening process. Is it any wonder that two years of blacksmithing totally unfit him for playing the delicate game of tennis? His whole body organization has become different. (247)

The changes in the individual components of the body—tendon flexibility, muscular strength and coordination—required in the art of blacksmithing thus produce physical

differences that preclude tennis playing, at least on the level that the player had achieved before becoming a blacksmith. More importantly, the process of change is entirely corporeal; while the tennis player might still be able to talk about game strategies and the finer points of swinging and serving, until he can physically *demonstrate* his skills on the court, he has essentially lost his memory of tennis. Only by putting the subject through the set of physical actions can it be objectively judged whether and how well the person remembers his previous corporeal organizations.

So memory, in essence, is not a faculty inherent to consciousness, but a form of corporeal organization. But for Watson, the hallmark of a truly healthy individual is not the ability to remember, but the ability to *forget*:

> In a perfectly integrated (!) individual the following events happen: As soon as a situation begins to call for the dominance of a certain habit system, the whole body begins to unlock: the tensions in every set of striped and unstriped muscles not to be used in the immediately forthcoming action are released so as to free all of the striped and unstriped muscles and glands of the body for the habit system now needed. Only the one habit system, the operation of which is called for, can work at the maximum efficiency.

In other words, the ideal body functions through a *forgetting*—that is, the measure of a body's performance (or, as Watson calls it, "perfect integration") is its ability to use only the organized system called for in the performance of a particular activity, in essence forgetting the systems that it had used previously.

The capacity to forget old organizational systems allows the individual to completely lose him or herself in whatever new situation he or she is responding to: "The whole individual thus becomes 'expressed,' his whole personality is 'engrossed,' in the act that he is doing" (Behaviorism 277). That is, the "individual" and her personality is not the result of some mysterious or indescribable essence contained in the depths of the psyche; rather, the "individual" truly emerges when a particular habit system is operating at maximum efficiency, to the point where the individual is fully engrossed in a habitual activity, with no remainder of consciousness—a definition of the individual that contradicts most conceptions of ego or self as that which exists separate from the individual's involvement in a particular action. This, according to Watson, was the measure of a healthy and successfully integrated person—one who is capable of becoming completely absorbed in the activity at hand, such that there really is no separation between "himself" and his work or activity.

Unhealthy individuals, by contrast, are incapable of efficiently dropping or reorganizing the elementary components of activity, and cling to organizational systems that have long since failed to be of service (because the individual no longer habitually participates in the practices for which those habits had been organized). The unhealthy individual carries the remnants of these habitual systems like so much useless baggage. Watson finds the most pervasive unhealthiness in the carryover of emotional habits from childhood: "The mass of organization we are allowed to carry over from our home life is one of the most tragic things in our makeup" ("Memory" 247). Ways of habitual response that a child learns before it "puts on verbal habits" ("Memory" 245) are especially dangerous, because it means that we subsequently cannot verbalize our

visceral responses, and hence, they remain below the level of our consciousness: "There is no way to tap it in any individual apart from putting him in the actual situation where the reactions were learned" ("Memory" 249). Because these emotional habits remain unverbalized and hence unknown to the individual, then, they continue to have detrimental effects, keeping the individual in a state of "infantilism" into adulthood, a state of affairs that Watson characterizes with scorn: "We weep when our feelings are hurt just the way we wept when our mothers scolded us. We sulk or weep when someone fails to greet us cordially and say 'nice fellow,' just as we sulked or wept when our fathers failed to say 'nice boy' when we performed for him" ("Memory" 247). Watson saw it as his duty and the duty of behaviorism to remedy the leftover detrimental infantile habits, which he calls "one of the most tragic things in our makeup" ("Memory" 247), and to create in its place more of those "perfectly integrated individuals" who could easily let go of old habits and organizational structures and build new ones, in a continuing response to changes in their environments and the new demands placed on them.

The body under the introspectionist rubric is unmanageable or resistant to intervention from the outside because of its mysterious mechanisms (like consciousness, thought, memory, etc.), which keep a crucial part hidden away from the gaze of both scientists and marketers. The result of Watson's characterization of memory as the organization of habitual corporeal systems is that the body rhetorically becomes lighter, mobile, flexible, and capable of quickly (or at least somewhat efficiently) changing in response to its environment. The real problem for Watson, as "Why I Don't Commit Suicide" and his child-rearing advice suggests, was that even if individuals could be

trained into more quickly abandoning habit systems, the institutional habit structures were older and ran much deeper. The slow bulkiness of institutions like family, church, state, and school inhibited the flexibility and mobility of Watson's ideal society and made it difficult for psychiatrists and medical professionals to effectively exercise control over the individual. If these institutions were liquidated, once the individual was "freed" of such cumbersome structural relations and obligations, he would then be available to be subject to another kind of economy—the economy of free market forces and consumer capitalism. In assessing behaviorism's real goal (as it came to fruition through Watson), Kerry W. Buckley remarks,

> The modern child would soon learn that real authority lay not in the family but in the marketplace and in its supporting social institutions. Achieving success depended upon internalizing the values of the corporate order. Success itself came more and more to be seen as the ability to emulate a style of living defined and exemplified by mass advertising. (143)

As such, Watson set about attacking these institutions from the ground up—starting with the most basic institutional bond, that between a mother and her child.

## Behaviorism's Affective Economy: Mother Love and Other Institutional Obstructions to Control

While stubbornly (if unconsciously) clinging to worn-out and burdensome emotional habits seemed to be a regrettable fact of life for a great many individuals, Watson maintained that the social structures and institutions that held sway in the 1920s were guilty of prolonging this clinging. Though all social institutions were cumbersome, Watson saved most of his wrath for the institution of the family, which he characterized

as the originary factor in the creation of dependent and unhappy individuals. In a series of articles published in the women's magazines *McCall's* and *Cosmopolitan*, later collected in a book called *Psychological Care of Infant and Child*, (cheekily dedicated to "the first mother who brings up a happy child,") Watson excoriates mothers for their part in prolonging their children's emotional state of infancy well past infancy itself. In a chapter, pointedly called "Too Much Mother Love," Watson tells his readers,

> Hence just to the extent to which you devote time to petting and coddling—and I have seen almost all of the child's waking hours devoted to it—just to that extent do you rob the child of the time which he should be devoting to the manipulation of his universe, acquiring a technique with fingers, hands and arms. He must have time to pull his universe apart and put it together again. Even from this standpoint alone—that of robbing the child of its opportunity for conquering the world, coddling is a dangerous experiment. (80)

As an imaginary corrective to the dangers of mother love, Watson proposed his own version of an ideal society, one that would be run by behaviorist principles. The problem, in Watson's characterization, is that 80% (he doesn't establish where he gets this number) of contemporary homes are "homes of whining and complaining," characterized by "restlessness and unhappiness"(5). Such a high proportion of unhappiness signals a breakdown of the traditional familial institution. Not only is there a breakdown in sexual relations between wives and husbands ("The men know little or nothing about training their wives"( 5)), but children of urban families have ceased to be "factors in production" in the familial economy—to say nothing of the fact that "scientific mass production" was

making women's tasks "so easy that they are over-burdened with time," which they use predominantly, according to Watson, by "destroying the happiness of their children"(2). Because children come into the world as *tabula rasa*, or as Watson describes it, "a bit of formless protoplasm"(2), parents play an indispensable role in shaping the child: "Hence all of the weaknesses, reserves, fears, cautions, and inferiorities of our parents are stamped into us with sledge hammer blows. We do not inherit our character, temperament, and special abilities. They are forced upon us by our parents"(3). Because the child/protoplasm in Watson's scientific opinion was so plastic and prone to being molded in any number of harmful ways owing to repeated exposure to its parents, Watson proposed his own solution to the breakdown of social institutions, the "behaviorist's utopia," where, Watson said, "we can dream of a better life"(6).

Given that the utopia is an idealized outgrowth of Watson's scientific work, one might expect this dream society to amplify his already-radical ideas about child-rearing and the place of the family. And indeed, the Utopia develops much like one would expect given Watson's investments and interests. Though an ideal society, every aspect is regulated by prohibitions and strictures (and is hence defined primarily by the negative.) Hereditary wealth is not allowed. Breastfeeding of children is not allowed ("psychologically it is most undesirable"(8)). Knowing the identity of one's child is not allowed. Utopians, "no longer guided by history and tradition"(7), have no religious or political affiliations, because such affiliations imply previously established categories and not sufficient experimentation; but Utopians, trained in effective scientific methods, are quite aware that "they must work out this happiness by trial and error—by experimentation"(7). Disabilities are prohibited: "The few sporadic cases where children

are born with one or another type of defective organ are turned over to the physicians either for painless death, for experimentation, or for developing special compensations"(9). Through the structure of the system, children are not allowed to develop attachments to mother, father, or siblings: they rotate through "families" every four weeks until they are twenty-one.[14]

Thus, the institution of family in Watson's utopia loses much of its power; it can't form a snarl in the easy functioning of power on the individual. Of course, the individual is not then simply liberated from all attachments—the "freeing" of the individual from the unhealthy attachments created by the traditional family environment frees him up to be more available to the gaze of the medical establishment, which, as one might expect, is in Watson's utopia the primary authority: "The doctors in Utopia have the most important role in rearing children"(13). Paid (well) by the state, thus linking medical with state power, each physician "keeps well" seventy-five people through unconditioning. A group of seven physicians has the power over life and death: "idiots" and "feeble" children can be euthanized; "large women and the occasional ill-favored women are not allowed to breed" (12), and any individual who displays behavior that cannot be reconditioned can also be voted by the physicians to be put to death. However, Watson says, as he says elsewhere, such treatment of individuals should not be considered punishment: "Such things as punishment or prison are just as strange to us in Utopia as the rack and pinion to present day Americans. There are no such words as right or wrong and no such word as punishment"(14). Instead, "misbehavior" like boldness, shyness,

[14] This emphasis on strictures and prohibitions is especially interesting given Watson's advice to parents in *Psychological Care of Mother and Child* to restrict their use of the word "don't": "Because of the frequency with which we use them, 'don't' and words like it soon become the ruling forces in the life of every child. The power of the state, church, and society is built upon this simple principle. They all teach us to live a life of fear"(59).

sulkiness, tantrums, pugnacity, unnecessary fear, (sadness?) are considered to be "research problem[s]"(15) to be scientifically remediated by a behaviorist-physician. Panoptic methods of surveillance keep the children within clear visibility of the adults, and Utopian subjects, children and adults alike, within clear view of the state/medical gaze: "Each house is large enough to give each child a separate room, and a large common playroom well supplied with windows of quartz glass"(7), and "Each home is equipped with a periscope so that the parents can glance now and then at the child without being seen"(16). The behaviorist utopia's primary function is to break down the power of institutions, but in a way that transfers the power to the medical (biopolitics), allowing it to become more individuated.

In her 1990 memoir *Breaking the Silence*, Watson's granddaughter Marietta Hartley describes the effects of the training received by her mother Polly, the daughter of Watson and his first wife, Mary Ickes, and the effects of Watson's behaviorist approach to child-rearing in general: "Grandfather's theories infected my mother's life, my life, and the lives of millions. How do you break a legacy? How do you keep from passing a debilitating inheritance down, generation to generation, like a genetic flaw"(Hartley 18)? Though Hartley herself had relatively little contact with "Big John" Watson (and only discusses him at length in the book's prologue), her memoir is clearly an attempt to sort through the effects of Watson's experiment in raising children the behaviorist way. As her grim catalogue of deaths and psychological problems in Watson's children and grandchildren suggests, the experiment appears to have been tragically unsuccessful:

> Billy [Watson's oldest son] became a highly respected psychiatrist in New York, fulfilling his father's dream. Ironically, that same Billy, brought up

> with 'minimal fixations,' took an overdose of pills in his office in Manhattan but was stopped by Jimmy. His second suicide attempt while in his thirties was successful. Little John, brought up with 'minimal fixations,' became a deeply religious man but continued to have a queasy stomach and intolerable headaches. Taking about twenty aspirins a day, his stomach went; he died in his early fifties of bleeding ulcers. Uncle Jimmy also spent years with chronic stomach problems but, after intensive analysis, is alive and doing very well. My mother, brought up with 'minimal fixations,' attempted suicide over and over and over and over. (Hartley 43).

In an ironic echo of her grandfather's essay from fifty years before, suicide emerges as a recurring theme of Hartley's memoir, something that has haunted her life: her father, an alcoholic, shot himself in the head while she and her mother were preparing lunch in the next room; her mother Polly attempted suicide a number of times, but never succeeded. Suicide even followed Hartley to her brief stint at college; in reference to Carnegie Tech (now Carnegie-Mellon), she says, "It was the school for *Harold and Maude*. Our principal occupation was to keep each other from jumping off the top of Moorwood Gardens"(107). And Hartley recognized her own suicidal tendencies, expressed not through overt attempts on her own life, but through more passive strategies, like marrying a pathologically jealous and abusive husband. "There are various kinds of suicide," she writes (107).

In Hartley's estimation, suicide resulted partly from the subverted affective economy with which behaviorism attempts to retrain its devotees: "All those early

feelings about my parents had bubbled up. All those years of pronouncing myself wrong and them right, hanging onto their rightness at my expense. […] I think suicide is aggression turned inward"(275). Notable here is the affective language used to talk about suicide (though not surprising)—feelings "bubbling up," tropes of inside and outside.

Indeed, what is particularly interesting about Watson's own preoccupation with the social problem of suicide fifty years prior to Hartley's book is that a close reading of "Why I Don't Commit Suicide" reveals that behaviorism's most crucial operations or investments is not only control, but *affect*. Both control and affect figure most prominently in Watson's discussion of institutions as the biggest obstacles to a "behavioristic world"(3). The interesting thing about the essay in the larger context of Watson's work is that it reveals some amount of confusion on Watson's part and a contradiction to his arguments for the end of the institution of the family as we know it in "A Behaviorist's Utopia" and *Psychological Care of Mother and Child*.

In "Why I Don't Commit Suicide," Watson seems conflicted over whether he wants to further dismantle these institutions because of their unhealthy hold over youth or whether he wants them to be invested with *more* affect. On one hand, institutions like church, country, and even marriage have failed to the extent that they have lost persuasive power—they can no longer evoke feelings of devotion among the citizenry, particularly the young: "[O]ne's flag, one's soil, one's institutions were old catchwords to call the youth to arms. They have all been deflated in value. […] Our financial and business geniuses no longer occupy the shrines they did. Hero worship is dead. Everybody and everything is looked upon with suspicion" (5). To solve the problem of American youth's disillusionment with the limitations of traditional institutions like

country, family, religion, and marriage, Watson argues, would require nothing short of a complete overhaul of the institutions that had become archaic, bulky, and burdensome. He singles out the university system (because it is crucial to the transition to adulthood) as one youth-driven institution particularly in need of revamping: "College ought to be made an environment like that of the outside world—tempered possibly, but similar" (3). Watson's version of the university would be one that shifted emphasis from what he considered to be arcane topics like Latin and Greek to more practical skills like vocational and technical training. In a 1935 newspaper article, Watson explained his vision of the ideal school system in more detail, one that sounds remarkably similar to certain systems in place today. He compliments the "experimental" schools, akin to our contemporary Montessori or charter schools, for creating a "miniature world" in which children learn practical tasks like making things and keeping shop. However, he says, while the experimental system worked well, when the children moved from that to more traditional public high schools, things tended to fall apart. So Watson proposed a new system, one that abandons what he considers to be useless or impractical arts, and offers pragmatic training in its place:

> When a boy gets to high school I would begin to let him out of its walls for part of the day and get him into the actual world…In college I would have no formal instruction at all. Certainly no textbooks. I would farm the students out to industry and meet them every evening to discuss their work with them. I would act as a coach. They would grow up in a world of reality and they would know what to do with themselves. Put them down anywhere, before any kind of job, before any kind of person from

> railway magnate to a tiller of the soil, and they would be at home. (Ledger Syndicate Magazine, 1/06/35)

Despite what may seem to be a rather gloomy catalogue of the institutional failures, however, Watson finds the imminent failure of traditional institutions to be quite a happy development. "I do not decry this," he writes. "In the end I think it will work for more independent and happy lives, but the facts remain that these values have weakened for the young men and young women entering maturity today, and nothing has come to replace them"(6).

Watson sees the capacity of behaviorism to shape the world, to control life. But the way he wants to do this is to make everything more romantic, something that seems completely counter to his agenda as he has stated it for his entire career. He muses rather wistfully, "can't we add an air of romance" to business—whereas in the rest of his professional career, and indeed in the experiments in his home life, he was intent on weeding out any romantic notions of life—intent on making relations completely mechanical. His musings perhaps reveal a recognition of failure on behaviorism's part. They also reveal a nascent recognition of the necessity of affect in instilling desire, which is perhaps *the* prevalent aspect of marketing today. "Nobody today is trying to **sell** the youth the romance that lies in every kind of honest work" (14, my emphasis). Note the emphasis on romance here. Young people are disaffected, cynical, and their habits of interaction reveal this. Watson recognizes this as a problem of affect, a lack of affect. This is rather a touching essay, because Watson is clearly deeply affected by the issue of suicide. He asks emphatically, "<u>What steps can we take now to help the two thousand people who will take their own lives this month</u>"(14, emphasis in original).

Many of behaviorism's critics did and still do characterize (and in doing so, dismiss) Watson's behaviorism as something of a "hopeful monster" (footnote this expression), an unfortunate and badly conceived social experiment, with John Watson and his family tragic evidence that applying mechanistic principles to complicated systems is a project that will always be doomed to failure. Perhaps it was, in Watson's particular case. However, such easy judgments and dismissals of concepts always bear the risk of failing to engage substantially enough with those concepts, with the consequence that what's really important about them slips by. In this case, while behaviorism is frequently characterized as an affectless, misguided application of positivistic scientific principles, it seems apparent that an affective circuitry was deeply enmeshed in behaviorism, and that found its expression in the later instantiations of behaviorism (behaviorism's legacy): the emphasis on the creation of affect in contemporary forms of marketing.

## Building the Better Consumer

In *The Consumer Trap*, a book that purports to show "how big business marketing campaigns penetrate and alter the lives of ordinary Americans," Michael Dawson notes that the ties between capitalism (which relies on the ability to control the desires of its constituents) and behaviorism have run long and deep:

> [W]hile marketers' attachment to a fundamentally behaviorist professional worldview is rarely elaborated into formal theory, it is real and powerfully rooted in institutional imperatives. Indeed, it is no exaggeration to say that

> modern corporate marketing has been a huge, expanding project of applied behavioral research, by far the largest in human history. (58)

Dawson traces the origin of the ties between marketing and behaviorism to Watson. Advertising had existed for decades when Watson began working in the early 1920s as an advertising campaign director for the J. Walter Thompson Company (after he was fired from his academic job at Johns Hopkins for sleeping with his research assistant, Rosalie, who later became his wife). However, little systematic thought had been given to the psychology of advertising and to understanding how it might work more effectively. As the economy began its slow shift from an economy of production as described by Thorstein Veblen to an economy of consumption, advertising began to take on a sense of purpose more extensive than just the necessity of getting one's name out there. In other words, though advertising was a phenomenon, it was not yet a science. Watson's biographer Kerry Buckley writes that while earlier forms of advertising tended to emphasize "a rational appeal to what were thought to be distinct mental categories," behaviorism "ignored questions of rationality or irrationality of mind and emphasized instead the malleability of human behavior" (139). Behaviorism's emphasis on the habits and behaviors of individual organisms (both human and nonhuman), and, perhaps more importantly, its emphasis on learning to control and manipulate those behaviors, provided an ideal template for thinking about how to get consumers to consume more. In his new incarnation as ad exec, Watson found a wide-open field of behavior to which he could test the skills he had learned in the laboratory.

However, a speech to the new "class" of salespeople at the J. Walter Thompson Company, while intended to make his behaviorist agenda clear, reveals the return (again) of the problem of affect:

> I found that the consumer is to the manufacturer, the department stores, and the advertising agencies what the green frog is to the physiologist. In physiology if we want to know how a certain bit of the nervous system works or how a special group of muscles and glands function, we go to the green frog and begin to experiment. Just so in industry, when we wish to know any ultimate fact about our business, we have to go to the consumer to find it out. Where does he live? What are his present needs? What should he need? How can I make him aware of those needs? How can I display my goods in such a way as to make him reach the decision 'Here lies what I need' and actually pay the price for obtaining it? ("Ideal Executive" 3)

At first this passage suggests a stock behaviorist response: comparing (and ostensibly reducing) the socioeconomic (industry) to the physiological (the consumer as lab animal, to be studied and dissected in order to yield up information). However, a closer reading reveals that the task was a bit more troublesome than Watson's breezy description makes it seem. While advertising pre-Watson was rhetorical in the sense that it made attempts (however vague) to appeal to *logos*, the strategy suggested by Watson focuses more on evoking and directing consumer *desire* ("What *should* he need?)—a volatile and unpredictable force if there ever was one. Watson's emphasis on displaying goods (that is, manipulating the environment) in order to create a response in the consumer holds

very much with the behaviorist agenda; however, the attention to desire suggests a departure of sorts from the strict attention to behavior and habit that Watson fiercely maintained in his older studies.

Again, in a different speech called "The Psychology of the Consumer," Watson's argument for a behaviorist approach at first seems confident: "Fundamentally, the, [sic] so far as his general behavior is concerned, the Eskimo and the Australian Bushman are alike. To reach either of them, you have to study the habits and customs of the people" (2:2); however, once again affect enters into the equation: "All this can be done only by breaking through his ordinary daily behavior and arousing his emotional activity. It is in the emotional side of the consumer's make-up that we find the springs to produce actions in the consumer" (2:2). While behaviorism had always professed to treat emotion as little more than stock physiological responses (rage, fear, love) to environmental stimuli, the notion that the consumer had to be seduced into performing a particular behavior—consuming—seemed to stymie Watson somewhat. Indeed, later in his speech, he refers to the consumer as "this most difficult of all animals to manage" (3).

In an article that examines the claims made about Watson's (and behaviorism's) impact on advertising in the 1920s, Deborah Coon suggests that Watson had less impact than he claimed to (though clearly if one examines his claims, they're a bit shakier than one might believe). Watson headed several advertising campaigns in the 1920s, including Johnson and Johnson's Baby Powder, Pebeco Toothpaste, Pond's Skin Freshener and Cleansing Tissues. Coon shows that the ad campaigns headed by Watson actually differed little from the ad campaigns that had come before him. Though others, like Buckley, have argued that Watson reintroduced the testimonial and used behaviorist

principles like conditioned responses to produce fear, rage, or love, Coon shows through an analysis of both Watson's Ponds' Cold Cream ads and ads from other companies that all of these elements had been around prior to Watson's tenure as an advertising executive:

> Watson's presence, as several historians have suggested, may also have provided advertisers with a certain legitimacy and authority through his scientific credentials and his scientifically grounded explanations. But the behaviorist Watson appears not to have provided advertisers with any particularly novel methods in the advertisements themselves. He seems to have continued methods and changes that were already well underway. (61)

But regardless of Watson's actual impact on advertising in his day (perhaps owing to his allergies to affect and desire), the behaviorist principles that still deeply inform contemporary marketing tactics suggest that Watson was onto something. In Watson we have the first explicit link between psychology and capitalism in that a systematized means of acquiring knowledge about individuals is put to work in the service of persuading those individuals to not only purchase more, but also to adopt the habits of consumers. Behaviorism and its proliferating effects and investments and implications for control of living beings happens to fit very well with a globalized consumer economy and a retail market whose only hope for marketing is to find the "magic button" of consumer desire that will make them buy *more*. Watson anticipates late capitalisms use of discernible, visible behaviors with which to make decisions. Behavioral habits of

organisms present a visible something *upon which* experiments can be made. These same visible characteristics also present an ideal sign for marketers.

One contemporary instantiation of the behaviorism-marketing complex is "the science of shopping," or "retail anthropology," invented pretty much single-handedly by Paco Underhill, who now runs Envirosell, a consulting company that studies the retail environments of its clients (many of whom are Fortune 100 companies) and recommends ways to rearrange those environments in order to create more sales. Citing the "dangerously overretailed"(31) state of the country in his book that presents the science of shopping, Underhill argues that success in the retail industry depends on gaining ever slighter edges (also that brand names no longer command the loyalty they did in decades past); thus, he says, "Today, in some ways, every decision is a new one, and nothing can be taken for granted"(32). The problem is at basis a rhetorical one, Underhill says; CEOs and managers of these stores attend very carefully to certain details, especially tapes of the transactions that take place store by store, daily, weekly, quarterly; however, what they're missing is a sense of their audience: "businessperson ignorance: They often don't really know who their customers are"(38).

With his retail anthropology, Underhill claims to give retailers the edge that arises from most efficaciously arranging the retail environment—that is, the store itself. Thus, the store is starting to be seen now as the most important medium for transmitting messages: knowledge produces seduction. And the way to create a retail environment that proves to be maximally seductive to the consumer (who throughout his book *Why We Buy* seems at once hapless and extremely powerful, lusted after with the kind of intensity that devoted birdwatchers have for rare tropical species) is to pay minute, rigorous

attention to the habits and behaviors of shoppers *in situ*, or interacting within the retail environment.

Underhill, who studied under Holly Whyte, the urban sociologist famous for his attempts to make cities more livable by studying in minute detail the behaviors of their occupants, applies the same principles of rigorously detailed observation of the habits and behaviors of consumers "in their natural environment"—ironically echoing Watson's analogy of consumers to animals. The animal analogy isn't simply accidental, however—Underhill's team of researchers (perhaps one should say "anthropologists") are called "trackers," who "stealthily make their way through stores following shoppers…noting everything they do" (13). The bird-watchers of K-marts and Williams-Sonoma. The best trackers, Underhill claims, are not academics or graduate students, who tend to load down and interpret their observations with textbook theories, but those people who make a living off of their observational skills: artists, actors, writers, a puppeteer. Underhill pays attention to minute particulars: how and where consumers read signs, where they head first in a store, their anatomical mechanics (in another echo of Watson, Underhill calls us "human machines" (43)) and the way the set-up of the store responds or fails to respond to those mechanics, and how many items consumers touch before they purchase something—in other words, any sort of behavior that might provide clues about how to produce a better customer. Here is an instance of a typical tracker's observations, made in the health and beauty aisle of a chain grocery store:

> Let's call her shopper number 24, a thirtysomething woman in yellow pants and white sweater, accompanied by a preschool girl, who enters the health and beauty aisle of a supermarket at 10:37 a.m. on a Wednesday

> morning. She has a handbasket, not a shopping cart, and has already selected store-brand vitamin C capsules, a large container of Johnson's Baby Powder, and a packet of snapshots she picked up at the photo-processing booth. She is also holding a shopping list and the store circular. She goes directly to the shampoo shelves and picks up a bottle of Pantene brand, reads the front label, then picks up a bottle of the store brand and reads the front label, then reads the price tag on the Pantene, then reads the price on the store brand, and then puts the store brand in her basket and exists the section forty-nine seconds after she entered it. (21)

Seeing, observation, vision—these are the things that Underhill brings up over and over again, and as such links himself firmly to behaviorism. The equipment used for retail anthropology is not only the keen eyes and observational stamina of the trackers, but also cameras: Super 8 time-lapse film cameras, video cameras, digital cameras, etc.

Through trial and error, Underhill discovered that polling shoppers about their experiences often fails, because they don't remember or they misremember details of their shopping experiences. Thus, what they *say* is unreliable; one can more accurately assess their interactions with retail environments by studying what they *do*, which can be observed and recorded. As a result of countless hours of videotape and Super 8 film, and dozens of tracking sheets marked by workers on the ground, the material components of the retail environment (including product placement, arrangement of displays, placement of shopping baskets, changing the angle of the aisle shelves) can be altered and rearranged, the better to evoke desires and raise the conversion rate of browsers to purchasers.

Underhill and his consulting company thus make their business the scientific management of desire. All advertising and marketing companies, of course, are interested in producing and directing desire; however, what's different about "retail anthropology" (as well as the electronic version in software like Customer Relationship Management, the most famous user of which is Amazon.com) is its emphasis on the precise empirical observations of consumer's behaviors and habits within a material environment, and the subsequent interest in altering that material environment in order to direct desire more efficiently. The habits of consumers in retail anthropology, like the infant or animal subjects of early behaviorism's experiments in conditioning and reconditioning, provide visible corporeal surfaces for power to map, produce, and control. Thus, though the concept of habit may not be part of our contemporary parlance of identity and subjectivity, one can be certain that *some* forces certainly are paying close attention to it.

# Chapter 5

## Habit's New Habitat:
## Drugs & the Discourse of Addiction

In 1887, "Dr. X," a morphia habitué of twenty-five years, installed himself in the Sanatorium L'Abri at Territet near Genova for the purpose of ridding himself of his habit. The patient had been encouraged to visit the sanatorium by his physician, Oscar Jennings, who had perceived that "a strong moral revulsion [against the habitual use of morphine] enabled him to summon up the necessary resolution" (105) to suppress the habit. Along with the gradual reduction of the amount of morphia administered, with the eventual substitution of rectal injections, the patient was aided in his recovery by Jennings's "therapeutic triad": tonics to strengthen the heart, Vichy water and lemon to decrease acidity in the body, and Turkish baths alternated with cold showers. Humming and the rhythmical effects of such "motion therapy" as walking and cycling were also recommended as methods for soothing morphia cravings. The patient was allowed to keep a small tube of morphia tabloids to ward off the crippling anxiety and feelings of *hantise* (haunting obsession) experienced by some habitués when the weaning process began. Jennings only required that his patients report everything to him, in the form of a

treatment diary: every feeling, both mental and physical; every bodily action; and everything administered to the body. One patient approvingly summarized Jennings's three principles: "Gradual but voluntary suppression; Constant surveillance without restraint; Absolute truthfulness to you as my physician" (204). In a diary entry written when Dr. X was well along in his treatment, details of the patient's physical and mental condition are carefully recorded:

> Mon./Tues. 8 o'clock 1 centigramme morphia. At 10, imminent craving. Tinnitus aurium. Took two glasses of Vichy water and lemon juice. This always pulls me together, like Byron's hock and soda. Became quite comfortable and read until 2 o'clock. Dozed in a restless way until 4, waking with a feeling of general puffiness and swelled-headedness. Hands hot and tingling, scarcely able to open the eyes, extremely tired, but no obsession, then took D. [digalene or digitalis] and S. [strychnine] with good result, feeling in the course of a quarter of an hour absolutely well and comfortable, hands clean, cool and pale, and nails free from capillary stasis. Whole organism feeling as if restored to perfect tone. I had taken before the two drugs just mentioned, a centigramme of caffeine which had not appeared to have done any good, but may have had something to do with the feeling of complete restoration. Thought I was not going to sleep any more and resumed book, but shortly went to sleep. Was roused by servant bringing in early breakfast, when I was in much the same condition as at 4 o'clock. Another glass of Vichy and lemon juice made me however quite fit, and after lying in bed and stretching and yawning

> with delight, opened the window wide, got up and dressed. Temperature 20° C., douche at 10, then walked about till lunch and was somewhat tired afterwards. Went nevertheless to club, and played three games of billiards. Came home exhausted, but douche and D. and S. had the usual good effect. Two loose stools during the day. (151-152)

The minute attention given here to the physical and mental affects ("Hands hot and tingling, scarcely able to open the eyes, extremely tired, but with no obsession"; "Two loose stools during the day"); the precision in recording the amounts of substances taken ("a centigramme of caffeine"); a strict attention to the fluctuations in physical and mental states; and the regulation of activities in order to relieve discomfort or stress—all suggest an accordance with Jennings's principle of *se menager*, "to take care of oneself." Care of the self entailed above all a rigorous attention to organism, the physical as well as mental states (this attention, being recorded in written form, was seen to be materially present), and was the most critical element in the restoration of the patient's will, which Jennings believed to be the root cause of the habituation.

Forty years later, the U.S. Congressional Committee on the Judiciary House of Representatives prepared its statement in response to the three days of testimony it had just heard regarding H.R. 12781, a bill sponsored by Pennsylvania Representative Stephen J. Porter regarding the establishment of two federal narcotic farms, one in Lexington, KY, and the other in Fort Worth, TX. In its statement, the committee described the purpose and function of a narcotic farm (which was not, as the name might

suggest, a place for the government to grow narcotics, but a penitentiary-hospital to which addicts convicted of a federal crime might be sent in lieu of a regular penitentiary):

> After visits to the largest and most important addict farms and institutions in the East, and more than a year's time spent in intensive study of our problem, we have come to the conclusion that in order to stamp out drug addiction, we must apprehend, segregate, and care for not a few, but all of the addicts of the State that can be found. We must remove them from the streets and send them to properly located addict farms, one for men, one for women addicts, where they will be far away from the centers of population.
>
> These farms are not intended to be and must not be regarded as penal institutions. The medical profession generally holds the view that addiction, however established, is not in itself a vice but is rather a disease with definite symptoms and definite pathology requiring definite medical attention, these institutions must therefore be regarded as health institutions for the rehabilitation of men and women. It is for this reason that the proposed law provides for the administration and supervision of the farms by the State board of health, which is composed entirely of doctors. The addicts must, of course, be kept under restraint and control, and have an open-air life with sunshine and good food, and sanitary living conditions, and above all, plenty of work suited to the strength and physical condition of the individual addict.

> By segregating all the addicts that can be found in the State and curing as many as possible, by rearresting and sending back to the farm for a long period of time those that go back again to the drug after the first cure, and thus prove that they are incurable, we destroy the market for the peddler and attack him from a new angle. We not only do this, we prevent the growth of drug addiction, because it is spread by the addict through his association with men and women. We protect society from a large amount of petty crime committed by the addict in his endeavor to secure money to maintain his addiction. In addition we save a vast sum of money every year to the State. (165)

Here is a very different set of concerns in regards to the habitual user of habit-forming drugs, a creature now called an "addict." Having only recently come onto the linguistic scene (the *OED* marks its appearance in the English language as 1909—introduced, ironically, by Dr. Oscar Jennings), the term "addict" no longer marked a set of actions, as the "habitué" did; nor did it suggest a condition precipitated by an individual's interaction with a specific habit-forming substance, as did the "morphinomaniac" or "chloralmaniac." The addict, rather, represented a new kind of subject position, a new site of medical and juridical recognition: one that could be diagnosed, legislated, and controlled. Unlike the nineteenth century habitué undergoing treatment in relationship with a single physician, the twentieth-century addict is not the responsibility of himself or his physician, but the State. As a State problem, then, the emphasis is on the management and control of the addict's unruly, viral body, a body incapable of bringing

its own cravings and wanderings under control, and a dangerous vector for the spread of the "disease" of drug addiction to others.

This chapter traces out some of the forces—rhetorical, social, technological, juridical—that acted in such a short time to dramatically alter what had once been considered a mostly private affliction (though one, to be sure, that was associated with the medical establishment) to something that was considered a public health issue, and a legal one to boot—especially when, as David Courtwright suggests, actual numbers of addicts had actually *decreased* since the 1890s, when the wave of iatrogenically (medically) addicted patients was at its crest. What is important is not just what these writers, mainly physicians, say about the condition alternately known as "the habit disease," morphinomania, morphinism, habituation, and called finally and uniformly, "addiction," but the method of treatment, the characterization of the afflicted's condition, and the conditions assumed to be necessary for carrying out proper treatment.

## The Morphinomaniac and the Habitué

Opiate habituation in the nineteenth century was almost exclusively the concern of physicians, who (having themselves been the inadvertent contributors to most cases of morphinism and other forms of habituation) searched, tested, and debated the merits of different methods of treatment for the problem, three of which were the most common: sudden withdrawal, gradual withdrawal, and rapid reduction. Levinstein and later Erlenmyer were associated with the "sudden withdrawal" or what we might call the "cold turkey" method (its contemporary instantiation memorably depicted in films like Danny Boyle's *Trainspotting*). This method, though harsh, was held by its advocates to be the

best form of treatment, both because the pain of withdrawal would more memorably imprint itself on the patient (who, presumably would not be eager to return to her former state of habituation knowing that she would eventually have to relive such an experience), and because the sudden withdrawal method (being a quicker form of treatment than the gradual withdrawal method) made it less likely that the patient would eventually be able to smuggle in her own supply of the drug, which was always a concern given the desperate condition of a patient gripped in the craving for the drug. Others, notably Jennings, felt that in weaker patients the sudden withdrawal could lead to a general systemic collapse (since the cells and organs had been accustomed themselves to their new alkaloid conditions), and so he advocated the "rapid reduction method," where the amount of morphine (usually a lot) that the patients were accustomed to taking was rapidly reduced, as the name suggests, to the bare minimum that could keep the patient comfortable, and then that was gradually reduced to nothing, and tonics and system strengthening drugs were applied in the meantime to keep the rest of the patient's system up to snuff.

Most writers on the subject attribute the sudden rise in morphine addiction in the second half of the nineteenth century to the discovery of the hypodermic syringe when it first came into use about 1859. Unlike opium eating and smoking, which were forms of ingestion common among Chinese habitués (who, of course, had fallen victim to the habit through a specific path of their own, namely, the British forcing China to comply with their importation scheme), Europeans and Americans found subcutaneous injection to be more to their liking, a fact remarked upon by physicians like E.P. Hurd, who said of the hypodermic wave, "a new vice has sprung into existence more peculiarly suited to the

temperament and habits of Occidentals" (ix). So there seems to have been a convergence of elements: the development and implementation of a new technology (the hypodermic syringe), the development of morphine (1817), the situation of physicians at the time (living far away from their patients), to correct for which they left the syringe and a supply of morphine to be self-administered by the patient, and the peculiar demands of "modern life," which Erlenmyer, Jennings, and others all invariably point to: its tendency to create neurasthenias and mental taxation of varying sorts, and the ease with which these ailments are soothed by the simple administration of a powerful drug. Hurd, like other physicians of his time, barely suppresses admiration for the effects of the drug, which he calls "speedy and magical" (ix). However, in the nineteenth century there seems to be a clear awareness that though the mental make-up of the unfortunate victim of morphine addiction may have already been compromised, the other elements—the technology, easy access to the drug, and social problems of a more systemic sort—were also likely causes. In fact, while others even of his day (like the author of a handbook entry on the opium habit) attribute morphine addiction to a problem of the will or an overly self-indulgent personality, Hurd seems to be much more matter-of-fact about the reasons for addiction:

> The patient obtains a hypodermic syringe of his physician or of some druggist, and a quantity of morphine, the doses of which he readily learns (sometimes a prescription given him by his physician enables him to get a standard solution any number of times he desires), and he is now on the downward road; he has become a morphinomaniac. This is the way the

> vice comes to be generated; no one ever becomes a morphinist without some powerful motive; pain, mental distress, or insomnia. (x).

The "vice" of morphinomania is here linked explicitly to the liberal prescribing practices of physicians, pain or some other physical distress, and the magical properties of the drug. To treat the problem, then, requires an attention to the systemic causes for morphinomania, including a tighter control of physicians and their prescription practices, and more vigilance and control on the part of the physician himself. While twentieth-century writers like Lawrence Kolb and others characterize deficiency of the will and moral sense as the *causes* of the addiction (i.e., that the individual is essentially an addict before he has ever touched the drug), Hurd attributes these symptoms to the *effects* of the drug, painting a pathetic, empathetic portrait of suffering:

> The morphinist suffers from insomnia, nightmare, hallucinations, trembling of the hands and tongue, impotence, hypochondriac moroseness, neuralgias, and frequent febrile attacks; he is lean and cadaverous, his face is expressionless, his eyes have lost their brilliancy, his memory is poor, the power of mental application is absent; he becomes treacherous, suspicious, untruthful in fact almost demoralized; a full injection of morphine for a time relieves him and brings back a sense of *bien etre* and the ability to work, but the relief is of but fleeting duration, and the miserable victim soon again sinks into the abyss of despair. (xii)

As Hurd's description suggests, dependence upon opiates was never considered to be a desirable condition—the title of H.H. Kane's little book *Drugs That Enslave* (1881) reinforces this perception. But even up until the late nineteenth century physicians

revealed some amount of hesitation in identifying a particular group of symptoms as a unique and identifiable syndrome: habituation or addiction. In an 1870 article calling the medical community's attention to potential problems with the hypodermic injection of morphine (which had been until then widely touted as a delivery method that did not cause habituation in patients), for example, Dr. Clifford Allbutt describes the symptoms that tended to occur when injections were stopped, without actually classifying them as characteristics of an identifiable disease: "I have much reason to suspect that a reliance upon hypodermic morphia only ended in that curious state of perpetuated pain, of irritability and depression, and of artificial need of a certain stimulant, which I have observed in the nine cases of neuralgia" (330). Hence, some patterns of behavior are recognized here—perpetuated pain, irritability, depression, and an "artificial need of a certain stimulant," suggesting a close attentiveness on the physician's part to the physical and emotional reactions of his patients. Allbutt's description here reveals an emphasis on empirical observation, on describing what appears to him, rather than assumption or judgment. "I have observed in the nine cases…" A certain repetition of signs across singularities (different bodies), though not something yet that necessitates a positive identification.

As the problem of iatrogenic addiction increased, though, later writers began identifying this group of symptoms as a single, identifiable condition, one of the most common nineteenth-century terms for a dependence on morphine being "morphinomania," the individual displaying such symptoms characterized as a "morphinomaniac." Hurd, who translated Albrecht Erlenmyer's book on his popular treatment for morphinomania, defines the term in his translator's introduction:

> The words *morphinomania*, or *morphinomania*, and *morphinism* are used to designate the sum of morbid phenomena resulting from the abuse of morphia. The word morphinism may be compared to alcoholism, and morphinomania to dipsomania: the propriety of calling inveterate addiction to the morphine habit a *mania* is obvious to any one who considers how completely the will and moral sentiment of the victim are dominated by the passion of the narcotic. (ix)

Hurd's definition emphasizes the state of being of the condition, which is not a characteristic of the individual who has contracted the habit, but of the strong cathection onto the drug itself: "the passion of the narcotic." Even the structure of the name itself—"morphinomania"—was, like "dipsomania," "tobaccomania," or "choralmania" defined or characterized by its causal relation to a specific drug.

In *Opiate Addiction, Morality, and Medicine* Geoffrey Harding, discussing English perceptions and treatments of substance addiction, says that in the first half of the nineteenth century opium eating was regarded as a minor vice, akin to heavy smoking or drinking, and then toward the end of the century became reconfigured as a medically treatable disease. In America too, the opium habit is described as early as 1887 in a medical reference handbook as a "disease," and said to be one of modern times. The great majority of the people writing about the opium habit in the nineteenth and early twentieth centuries were physicians, and mostly they were talking about treatment. Like Kane's argument in *Drugs That Enslave*, the author of the handbook entry attributes the increase in opiate habituation in America, England, France, and Germany, to the increased number of neuroses. (Among Oriental users, he says, the use was attributed to

the desire for sensuous pleasure.) While (predicting twentieth-century assessments of opiate addiction as the result of a "defective personality") the author admits that this is the case in only 25% of the cases of opiate habituation (the other 75% were iatrogenically addicted, or their habit arose originally from the treatment of pain): "[A] chronic opium habit, due to defective will-power and to all the weaknesses transmitted by neurotic vice, is by no means uncommon. Nearly every asylum contains, side by side with inebriates, chronic morphinists, the only reason for whose habit seems to be a defective and demoralized willpower, which, in turn, is directly traceable to some inherited neurotic taint" (327). [aside: often habituation is described as "indulgence in the habit," as in (327), a characterization that adds a distinctly moral flavor to the discussion of the morphia habit—people indulge because they are weak and lacking in will-power. Such an assessment has a much different rhetorical effect than calling them "victims of the habit," which more sympathetic doctors like Kane and Jennings do.]

Confirming Harding's assessment of English opium smoking as a minor moral vice turned medical problem, Kane, too, delimits opium smoking as a moral vice in America circa 1882. The first known smokers of opium (a "sporting character") in 1868 and 1871 soon spread the vice, Kane says, to a "class of gamblers and prostitutes" (1), who then led astray young men and women "of respectable family," who "were being induced to visit the dens, where they were ruined morally and otherwise" (1). When the middle class sons and daughters got involved with the underworld opium smokers, the story goes, then the authorities stepped in, banishing the smokers from the larger smoking dens into less desirable, more vice-ridden conditions:

> Men and women, young girls,--virtuous or just commencing a downward career,--hardened prostitutes, representatives of the 'hoodlum' element, young clerks and errand-boys…were to be found smoking together in the back rooms of laundries in the low, pestilential dens of Chinatown, reeking with filth and overrun with vermin, in the cellars of drinking saloons and in houses of prostitution. No one can question the fascination of a vice, the strength of a habit that will lead people into such degradation of the gratification of the abnormal appetite. (2)

Habit here is associated with appetite, craving, and vice, a moral failing, but is not defined as a medical problem. This version of the habit as vice somehow suggests a lighter yoke, something easier to shrug off or ignore than the version of addiction as a medico-legal problem, or (as Lawrence Kolb designates it 45 years later), as a manifestation of a flawed personality. It's clear from the mix of characters that Kane describes in the passage: men and women, the virtuous and the vice-ridden, errand-boys, laborers, hoodlums, all smoke together—that is, what they have in common is opium, is the drug, rather than some inherent personality flaw. Such a rhetorical distinction puts the onus or burden on the drug rather than the person.

**Seduction and the Will**

Indeed, while a certain moral failing was often blamed in cases of morphinomania, the entrenchment of the habit was attributed in large part to the seductiveness of the drugs themselves. Kane's *Opium Smoking in America and China* (1882), ostensibly written as an expose and condemnation of opium smoking,

characterizes it as a "vice" that has been "indulged in by some six thousand of our countrymen, male and female, whose ranks are being daily recruited from the over-curious, foolish, indolent, or willfully vicious" (iii). However, from the acknowledgment section in which Kane thanks one Ah Sing, the "keeper of a 'joint' in Mott Street" (vii), one suspects that Kane's relationship to the drug is less clear cut (i.e., condemnatory) than his initial contempt lets on. As such, Kane's book presents a valuable site for analysis: a physician who has personally experienced the seductive effects of the drug, and hence recognizes its fascination and its danger.

Kane's interest in opium smoking had been piqued by the admission of an opium smoker to the hospital in which Kane worked as a physician. In order to study the effects of the drug more closely, Kane invited a number of smokers to his house, which enabled him to make observations at a close distance. He also persuaded two of his male nurses to try the drug so that he could observe its effects on the novice. Though the nurses were "constantly under his observation," (v), Kane was unsatisfied with remaining an objective observer. At last he tried the drug himself, for the ostensible purpose of obtaining a fuller perspective on its effects:

> Finally, I smoked myself a number of times, both in large and small amounts, and often to decided excess, so that I might be the better able to fully understand the subjective symptoms. Otherwise I should have been obliged to depend upon the word of the habitual smoker, which is not always reliable. (v-vi)

This passage is rich in rhetorical irony; one wonders what led Kane to believe that he could depend on his own accounts of experience under the influence of opium any more

than the accounts of the habitual smoker—especially when he smoked to "decided excess."

Touted as an exposé and condemnation of the spreading problem of opium smoking, Kane's book reveals through its careful, interested, and obviously first-hand descriptions of the opium smoking apparatus and opium dens (he takes special delight in correcting Charles Dickens' account of the opium "joint" in *The Mystery of Edwin Drood*) an underlying fascination with the drug and its use, even as he overtly condemns such behavior. Kane takes it upon himself to clear up the misinformation about the manner of preparing and smoking the opium: "So much misconception exists, and so many false statements have been made as to how opium is smoked, and with what kind of a pipe, that I feel it my duty to describe in detail the method and the apparatus" (32). Breezily dismissing accounts of the smoking process in *Blackwell's* and other popular magazines, Kane describes the pipe and accompanying apparatus with the confident authority of the expert. The language used to describe the pipe, for instance, suggests less sensationalized horror than curiosity tinged with admiration. Kane mentions the "pleasant lemon odor" of the smoke passing through the "lemon pipe," and the careful craftsmanship that characterizes the pipes and trays: "It may be of plain japanned ware or walnut or mahogany beautifully inlaid, and of variegated colors. Some of those used by the wealthy Chinese are very handsome" (37). Kane drops all pretense of condemnation in his description of the actual process of opium smoking, however. His extended description of the actual preparation of a pipe for smoking, for instance, is worth quoting in its entirety:

> Having the necessary article and materials, the smoker settles himself comfortably upon his side, takes up a little of the treacle-like mass of opium upon the steel needle, or yen hauck, and holding it above the flame of the lamp, watches it bubble and swell to six or seven times its original size. In doing so, it loses its inky hue, and becomes of a bright golden-brown color, and gives off a pleasant creamy odor much admired by old smokers. Poor opium does not yield so pleasant an odor, is liable to drop from the needle into the lamp, and rarely gives so handsome a color, the yellow being, here and there, streaked with black. This process is known as 'cooking' the opium. Having brought it to a proper consistence, the operator, with a rapid twirling motion of the fingers, rolls the mass upon the smooth surface of the bowl, submitting it occasionally to the flame, now and then catching it upon the edge and drawing it out into strings in order to cook it through more thoroughly. This is called chying the mass.(41-42)

After explaining how the opium is rolled into a pill, thrust on the needle and warmed, Kane describes the actual inhalation of the opium:

> Inhaling strongly and steadily, the smoke of the burning drug passes into the lungs of the operator and is returned through the nose. This smoke is heavy, white, and has a not unpleasant fruity odor. It is hardly necessary to say that the smoke never passes out through the ears and eyes [indirectly poking fun at an inexpert reporter on opium dens that Kane referred to at the beginning of the chapter]. Having finished this bolus which requires

> but one long or a few short inspirations, the smoker cools the bowl of the pipe with a sponge and repeats the operation as often as is necessary to obtain the desired effect. Smokers are classed as 'long-draw' and 'short-draw' men, according as they consume the pill in one or several inhalations. The long draw is undoubtedly the most injurious" (42-43).

From the language of the passage, it seems clear that Kane takes a certain amount of pride in his knowledge of the opium smoking community. Dismissing those who spread spurious information about the process of smoking, Kane assumes the mantle of expert clearing matters up. He provides the proper Chinese names for the opium pipe apparatus and cooking process, disclosing his insider status; he also provides deft, detailed, and not at all condemnatory descriptions, often subtly identifying with the smoker; for instance, he notes the "not unpleasant fruity odor" or "pleasant creamy odor" of the smoke, the "bright golden-brown," "handsome" color of premium opium. In the process, Kane ends up undermining his ostensible rhetorical purpose for the book—namely, to shed light on the "vice" of opium smoking. While the purpose of Kane's book is cited as clearing up the misinformation promulgated by other sources, his careful, detailed descriptions sound more like a manual for opium smoking than an innocent presentation of information.

But even for those who hadn't been directly introduced to the drug, its seductive powers worked through writing. Kane condemns the seductive power of Thomas DeQuincey's *Confessions of an English Opium Eater*: "Men and women who had never heard of such a thing [as opium-eating], stimulated by a curiosity, their minds filled with the vivid pictures of a state of dreamy bliss, a feeling of full content with the world and all about, tried the experiment, gradually wound themselves in the silk meshes of the

fascinating net, which only too soon proved too strong to admit of breaking" (22). And, "Nor does the final confession of the intense pain, the abject misery, the tottering of the mind, the crumbling of the reasoning and will power, and the ever attendant and impenetrable gloom of a living hell, serve to fully counteract the baneful effects of the portrayal of the pleasures of opium. The reader, confident of his ability to stop short of the ever-shifting line that divides the happiness from the misery, is in no wise deterred from trying the danger-fraught experiment. I know of several patients who began the use of opium simply from reading this most pernicious book" (23). Another physician, Thomas Crothers, writes that many people, their attention piqued by reading De Quincey's vivid and fascinating account, have attempted to use his experiences to program their own. However, Crothers says, though the effects of morphine are to an extent subjective (that is, one's mental state and imagination plays a large role in the actions of the drug upon the consciousness), using it with certain expectations (like that produced by reading De Quincey) were not always foolproof: "There was in De Quincey's case an exaltation of the imagination approaching a state of delirium, which could seldom be repeated in other persons under similar conditions" (98).

The drug was certainly seen to be seductive. However, unlike the seductiveness of *life* discussed implicitly or explicitly by contemporaries of these anxious physicians like Darwin, Butler, James, and Bergson, which draws the human into a more open and ethically responsive relation to the world, turning the subject inside out, as it were, the seductiveness of the drug temporarily draws one out only to create eventually a mechanical repetition, the throbbing need of the cells: more, more, more.

Habituation, in contrast to morphinomania, was regarded primarily as a disease of the will, sapping vital energies from the habitué until they became the worn-out ghost that haunts so many narratives of opium use. Restoring the will was the key to successful treatment, which is why Oscar Jennings and other physicians insisted that habitués come for treatment of their own accord, through a sincere desire to be freed of the habit. Jennings used the image of the storage battery (invented by Gaston Plante in 1859) as an apt metaphor to describe the circuitry of will in the normal individual and the habitué:

Because it's a disease of the will, though it's possible to cure the morphia habit against the habitué's will, these cures don't last long, and the chance for relapse is high. The physician in these cases thus served as a pedagogue, aiding in "the education of the dormant will" (5); while the patient had to voluntarily undertake treatment and do the work of attending to the care of himself and carefully recording the details, the physician's primary responsibility was to keep the patient cheerful and hopeful about progress toward recovery. The mechanism of the craving that keeps up habit, according to Dr. Sainsbury (*The Cure of the Morphia Habit*) is one of cellular unrest, the body accustomed to a particular mode of molecular motion—produces a state of cellular *ennui*, reflected in the external state of the patient. The restlessness and malaise resulted from a projection of a future in which these cravings would never be satisfied. The cells and the body must therefore be re-educated—another physician wrote that "Will power must be *led forth* from its retreat" (87). Jennings also urged a purity of purpose on the part of the habitué's attending physician to maintain an internal conviction that the patient could be cured of his habit. A combination of these effects sufficed in Jennings's mind to return

self-control and will to habitués, allowing them to overcome the powerful seduction of the drug.

The deceptiveness of habitués was commonly assessed as an obstacle in the way of treatment, a characterization that persisted at least until the Congressional hearings in 1928. A physician writing in 1907 describes this deceptiveness not as a reaction to the withdrawal treatment, but as a general psychological characteristic of habitués: "Here we find a peculiar psychological condition similar to hysteria, which forces the patient to try instinctively to deceive the physician" (Adams 13). The Inspector of Prisons, testifying before a Congressional committee in 1928, said that "Probably the greatest single symptom of moral deterioration is the tendency of an addict to become untruthful" (134). Thus habitués were often impediments in the way of their own progress, which required of the physician and attendants a program of continual and unceasing surveillance of the recovering patient. The surveillance mechanism is apparent in Oscar Jennings' accounts of his patients' morphine withdrawal (though in fact, Jennings gave his patients tabloids of morphine so that they could take them if they felt they were in dire straits, provided that they told him), and surveillance is discussed as one of the primary mechanisms for aiding in the patients' withdrawal owing to the ostensible deceptiveness of morphine habitués: "[T]hey must be constantly and closely watched. They haven't a particle of moral courage left, and their word cannot be depended upon, while at the same time they are expert in the art of practicing deception; so that a rigid surveillance both by day and by night is imperative" (Anders 7). Surveillance was deemed to be necessary after the treatment too, given the danger of habitués falling back into their habit.

**New Definitions of Addict and Its Consequences**

Courtwright, Dark Paradise: "Objective evidence indicates that, far from increasing during the early twentieth century, the rate of addiction declined steadily from 1900-1914, from a peak of perhaps 4.59 per thousand in the mid-1890s" (34), a decline that ironically matched an increase in anti-drug/anti-addiction hysteria (or at least strong concern, enough to get statistics measured and policies like the Harrison Act of 1914 passed). Also, "During the decade 1910 to 1920, the crucial period for the formulation of American narcotic policy, public opinion concerning opiate addiction was profoundly influenced by inaccurate and even falsified data. Laws were passed and interpreted on the premise that addiction was a widespread and worsening social problem, rather than a limited and diminishing disease" (33-34). A number of anti-narcotic "prophets" helped to spread the news of America's ostensibly worsening drug problem and did a great deal to sway public opinion, if the reactions of the newspapers are any indication. For example, temperance organizer-turned-anti-drug crusader Richmond P. Hobson was a pre-Anslingerite, using spurious statistics about the prevalence of drug addiction in America in the 1920s to spread fear about drugs and addiction: "Hobson continued agitating until his death in 1937, and his mix of questionable statistics and pseudoscience was instrumental in persuading Americans that addiction was both pervasive and malignant" (Courtwright, DP 33).

It was during the period from 1900-1920 that "addict" gradually came to supplement, then replace the terms "habitué," "morphinist," and "morphinomaniac" in the professional literature. In 1919, the "Report of Committee on Habit-Forming Drugs," published in *American Public Health Reports*, argued for a circumscription of the

terminology surrounding drugs and habituation. Habit-forming drugs were reclassified as inclusive only of opium and its derivatives, and excluded cocaine, alcohol, and various coal-tar drugs, which, though used habitually, don't have the clinical properties of opiates. The report also defines the term "narcotic addiction" and "narcotic addict" for the first time as conditions that are entirely physical:

> Narcotic addiction is a physical condition in which continued administration of narcotic drugs—from whatever cause or origin and in whatever type or class of individuals—has set up within the body a **mechanism of protection** against the toxic action of narcotic drugs. This mechanism of protection constitutes the mechanism of addiction-disease. A narcotic drug addict is an individual in whose body the continued administration of opiate drugs has established a physical reaction, or condition, or mechanism, or process which manifests itself in the production of definite and constant symptoms and signs and peculiar and characteristic phenomena, appearing inevitably upon the deprivation or material lessening in amount of the narcotic drug, and capable of immediate and complete control only by further administration of the drug of the patient's addiction….A definition along no other lines will include all who suffer from narcotic drug addiction. This symptomatology and the mechanism or process which produces it are the only common and characteristic attributes and possession of all narcotic addicts. (84)

The attempt here is to make a fully encompassing definition—unlike, say, Clifford Allbutt's earlier reluctance to identify a particular group of systems as unified disease, the

authors of this report want a systematized, standardized method for recognizing and naming the pathological condition known as addiction. Though habituation in common medical parlance had been previously theorized as a cellular desire *for* drugs or the impression on the cells of the drug, in this definition addiction is constituted as a "mechanism of protection"—in other words, a corporeal reaction *against* the actions of the drugs. Intended as a response to inconsistencies and misinformation about narcotic addicts and addiction, the report also serves to lay the foundation for establishing a link between the medical and juridical realms. Creating a standard definition of this pathological (medical) condition ultimately makes it easier to hand down legal judgments because everyone now knows what "addiction" and "the addict" constitute: "It is necessary to clear up and establish medical facts and from them to reasonably interpret the law" (84). The failure to create a clear, consistent definition thus far, reported the committee, had been the result both of neglecting the scientific and clinical aspects of narcotic addiction, as well as the sensationalism that accompanies the matter of addiction in the popular press: "the tendency to emphasize in a spectacular manner in the daily press, periodicals, and elsewhere, the old theories to the effect that the continued use of narcotic drugs is a vicious habit or an evidence of a neurosis or degeneracy, thus perpetuating the almost universal condemnation that has attended the addict" (84). The committee also blames the very short amounts of time devoted to the treatment of addiction in medical schools for the rampant misunderstanding of addiction and treatment for addiction among medical people: "The textbooks used [in medical schools] were, with but one exception, those which teach the old 'habit' and 'vice' theories, and in which treatment is confined to routine procedures and 'specific' formulas. None of the

more recent experimental or clinical work was mentioned" (86). As an unfortunate result of the medical schools' failure to train students to recognize addiction as a clinically diagnosable disease, the report argued, narcotics addicts tended to be treated not in clinical institutions, but in correctional and custodial ones. (a practice that eventually led to severe overcrowding of the prisons, which those testifying in favor of the legislation of two federal narcotic farms), made clear.

In a separate article in *The American Journal of Public Health*, Ernest Bishop also argued that narcotic addiction should be considered a medical and not a legal problem, and called for the education of administrative authorities, legislators, and medical professionals. Bishop's report indicates that by then addiction had clearly become a pathology and not the consequence of exposure to the drug. He writes, "As a definite clinical entity of physical disease, addiction is practically untaught in the school and unappreciated by the average medical man" (482). Addiction, as an identifiable pathological condition, was thus no longer the private concern of habitués and their physicians; rather, it had become a matter of public health, subject to campaigns and educational programs (and, though Bishop doesn't say it, to legislation as well). The narcotic drug addiction problem has been subject to "general scientific neglect," "apathy and indifference," and "widespread ignorance" (482). Thus, he argued, it was necessary to put the public health problem of narcotic drug addiction under the microscope, in an objective, sincere, scientific manner, in order to gain a proper understanding of it, and then to convey that understanding and symptomatology to the public at large. Though advocating a more humane approach to treatment (i.e. considering addiction to be a disease, not a criminal activity or moral degeneracy), Bishop's article is much more

concerned with establishing addiction as a clinical, empirically verifiable disease, a physical condition rather than a moral one (as was the case with Crothers and other physicians). As such, the term 'habit' is no longer a valid descriptor of the condition: "It is now a matter of established fact that description of narcotic drug addiction as 'habit,' 'vice,' 'morbid appetite,' etc., absolutely fails to give any competent conception of its true characteristics, and clinical phenomena" (482). Bishop himself refers to addiction as "narcotic drug disease" or "narcotic addiction disease," and calls for a more sustained investigation of its disease-like character in properly institutional settings: "a dispassionate review, analysis, and testing of the truths and errors of its literature" (485). In a later article, Bishop refers to those who habitually use opiates and other drugs as "addicts" ("Legitimate Use of Narcotics in Wartime" 323). "Further arguing or quarreling or debating over the comparative merits of various 'cures,' 'specifics,' panaceas and routine treatments is abortive of useful results and wasteful of valuable time. It has diverted in the past from advance in real knowledge and appreciation of fundamental facts, and has obstructed real progress towards ultimate ability in rational, scientific clinical handling of disease" (487). Bishop attempted to rescue the image of opiates as clinically useful drugs, valuable for relieving certain symptoms, and remove from the opiates their glamorous associations (first promulgated by De Quincey) of imagination stimulates and vehicles of rare insights. Thus, what had once been a moral failing and the result of the simple exposure to drugs was now a clinically identifiable and legislatable pathology.

## Control of the Supply

While physicians and public health officials worked to narrow the definition of the habitual user of narcotic drugs, the legal part of the medico-legal complex was busy carrying out its own agenda. Woods paints a picture in the introduction of drug addiction as a spreading evil (more on this Darwinian-Malthusian rhetoric below) "menacing" society and enslaving large numbers to the evils of the poppy plant and coca shrub: "unless there is radical improvement the evil will continue to spread, and the scope of narcotic enslavement will grow in ever widening circles" (1), he says. Arguably Woods hyperbolizes the problem in order to create a greater sense of urgency and more support for the drug control policies advocated by the Bureau of Social Hygiene and the soon-to-be-formed Federal Bureau of Narcotics. Indeed, Woods' rhetoric of the spreading menace of narcotics (he originally wanted to subtitle his book "The Drug Octopus") was intensified and extended by the Bureau of Narcotic's chief commissioner Harry J. Anslinger. Almost single-handedly in the 1930s and 1940s, Anslinger managed to restrict and then outlaw the possession and use of marijuana (since proven to be a non-physically-addicting substance) through his hystericized descriptions of the murderous rages induced in young people who had inhaled marijuana.

Courtwright argues that Woods' strategy reflected a common tendency among policymakers and anti-drug advocates to distort or mischaracterize the actual data. Courtwright writes, "The ethic that intelligent narcotic policy should be predicated on accurate data was almost totally lacking prior to 1940; no student of this period should assume, without the most careful corroboration, that government estimates reflected the true number of addicts" (6). Distortion or no distortion, however, Woods' was a tried-

and-true strategy, and he took full advantage of it throughout *Dangerous Drugs* to make the argument that in order to combat the spread of addiction, the best way to assess and control the spread of addiction was not by finding the best way to rehabilitate the addict, but by decreasing the supply of drugs available to the addict to consume. Woods acknowledges that "There are medical, psychological, and educational aspects of the problem of combating drug addiction which we shall not attempt to discuss thoroughly, for," as he says, " we are here concerned with the subject from the standpoint of legal and police measures" (3-4). With the rest of the book, he attempts to lay out some of these legal and police measures, what needs to be done and what will be done, in the hopes that it will cut down on the amount of narcotics abuse. Woods' main argument has nothing to do with controlling the behavior of addicts, but rather with cutting off the drug supply. In a chapter entitled "What Is To Be Done?" Woods argues that attempting to arrest drug smugglers is fruitless and impossible, and that the only way is to gain absolute control over the drug supply, making it primarily an international issue of enforcement and control. He writes,

> The illicit traffic in narcotic drugs cannot be stopped unless two definite steps are taken, and taken everywhere: First, each nation on the face of the earth, by legislation and administration, must confine the making and distributing of narcotics within its borders to medical and scientific needs; second, each nation must make resolutely certain that all narcotics entering its borders or leaving its borders are kept under unfailing control, the transfer of drugs from one country to another being so rigorously

> supervised that they cannot wander from the straight and narrow path. (108)

The rhetoric of control here seems very much to echo John Broadus Watson's desire to control the bodies of the consumers: the control of individual bodies through empirical observations of behaviors and habits, distributed across a wide scale, and control of bodies indirectly through legal and juridical control of an illegal substance.

The first means of such control is control of the drug supply within individual nations. A certain amount of narcotics must be produced for medical purposes, and that amount could be (and was) determined by surveying pharmacies and physicians about the amount of narcotics (opiates) they legally prescribed per year:

> We shall indicate the minimum requirements of such control [within a nation], but one must realize that the exact measures needed to accomplish the full purpose are not identical for all countries….As a minimum requirement, however, some central authority must be provided with an accurate accounting of every ounce of raw material that goes into each factory, and every ounce of the finished product that comes out. This is a simple matter of accounting, but it cannot be effective unless the enforcement of it is scrupulous, incorruptible, and unsleeping. (110)

Woods argues that narcotics are particularly amenable to control, because unlike alcohol, which one can make out of any organic matter that will ferment, narcotics must come from an individual, very specific source: opium poppies, the coca bush, the marijuana plant, etc.

The second kind of control that Woods advocates is international control of the drug trade, which at the time he was writing was ineffective because most countries neither tracked nor enforced their imports and exports as carefully as America did. Woods imagined such control in the form of both import and export certificates, by which governments could keep closer track and hence control narcotics entering and leaving their borders.

The drug supply for Woods is something like an unstoppable flow, something that's continually present and ready to ooze and burst through any breaches in the international enforcement system. The drugs are apt to "wander from the straight and narrow path" (108) of juridical oversight, and thus must be confined, monitored, "kept under unfailing control," "rigorously supervised" (108). Woods returns continually to the idea of "accounting," of the careful tally: "Every ounce of opium that goes into the factory must be accounted for, whether it is made into morphine or heroin, or any of the supposedly harmless drugs. Obviously, it would be easy to divert opium to the manufacture of illicit products if no accounting were required for such amounts of it as were supposedly made into harmless products. A practical working system can be devised, for it is known how much of the raw material is needed to make an ounce of each drug, close allowance for manufacturing waste can be made, and any unusual element—loss, or diversion, or damage—can be reported and considered" (110).

Woods imagines an uncontrollable and unruly flood of narcotics aiming toward their final end, the body of the addict: "Let the smuggler once get his hands on the alkaloids and they are as good as in the addict's needle" (109). Narcotics make use of and "rewrite" the legitimate systems of legally traded goods, the problem of creating

networks and connections—once in place, they can be used for activities other than those for which they originally were intended: "But this great and growing world-wide network of international trade, international communication, beneficent as it is, certain as it is….provides a means for evil communications and poisonous trade, as well as a wholesome interchange among nations. The channels that are kept dredged and buoyed to make safe and speedy the passage of wholesome foods and life-saving drugs, are also available to cargoes of the alkaloids of opium and the coca leaf which are destined to reach, not the doctor, but the addict" (114). Here there are interesting echoes of contemporary network rhetorics: computer networks that can be used for international communication, domestic connection, and the exchange of goods can also be used to distribute kiddie porn and videos of beheadings, but are subject to an even greater reterritorialization of state forces.

Woods' description of the leaky, difficult-to-control flow of drugs also partakes in a fairly Darwinian rhetoric, especially the Malthusian elements of Darwin, where the unstoppable, unruly force of life keeps multiplying and increasing, straining its earthly and organic bounds (the limits of the food supply), until the flow crashes, only to start again…the will to life, endlessly multiplying and proliferating. What seems to be the most terrifying thing about narcotics for Woods and other advocates of supply control is that they are linked to a worldwide network of production and distribution, and that there is a seemingly boundless supply (linked to plants, of course, which can keep growing and growing and growing). To read Woods and others is to picture the Dutch boy plugging up the hole in the dyke with his finger, except that other holes are rapidly springing in the dyke, a frantic situation: "The first requirement is, then, that the manufacture of narcotics

must be controlled in each country, in such a way and to such a degree that the drug cannot leak out" (111). A bit later he writes, "But if even one nation fails to control the manufacture of narcotics, the world will be flooded with them" (112) and, in reference to the certificate system, "It is the necessary complement to effective national legislation, closing the gap, and so leaving no breach in the continuity of narcotic supervision…" (112). Drugs in Wood's description have a decidedly feminine coding: flows and floods oozing and then rushing toward the (probably male) addict's needle. This flow versus the machinery of control: rigorous, unremitting, ceaselessly watching, relentless.

### Control of the Demand

The push for H.R. 12781 (which was successfully passed in 1928 and put into operation in 1934) was seen in part as a shoring up of the half of the problem that other federal anti-narcotic laws recently passed (in 1915 and 1922) had failed to address. While the Harrison Act (1915) and the Jones-Merrill Act (1922) had addressed the *selling* part of the narcotics problem—that is, legislatively controlling the supply and circulation of the drugs, both internationally and at home—both acts had neglected the *buying* part of the "problem": those members of the citizenry who habitually used the habit-forming drugs from which the state was so rigorously attempting to purge its borders. Thus, a double-pronged narcotics control machine was in effect: control of the supply, and control of the demand.

But while the proselytizing and sanctimony over the evils of narcotics and addiction influenced how the American general population thought about drugs, the medico-legal judgments of narcotics, like those by Lawrence Kolb, probably did more to

actually dictate the course of how those with "the habit" were treated—as derelicts, victims of disease, or criminals. Kolb, a psychiatrist by training, worked as a U.S. Public Health Service official during the 1920s. With A.G. Du Mez, a pharmacologist and fellow Public Health Service official, Kolb co-wrote a Public Health Report which provided statistics from all over the U.S. about the ostensible increase in the amount of addiction. Over the next few years, Kolb wrote a series of articles "demonstrating" that narcotic addiction came about not as a result of continued exposure to drugs (as nineteenth century physicians had suggested), but because of the addict's "psychopathic" or "nervously abnormal personality," making the condition of being addicted to drugs a result of identity rather than environmental conditions. Many nineteenth century writers on narcotics and addiction noted the link between the labor conditions and the propensity to take palliatives like drugs—instances of addiction were far higher among the manufacturing classes who worked in cities and among "brain workers" like physicians than among those with occupations that allowed them to work outdoors.

In "Pleasure and Deterioration from Narcotic Addiction," for instance, Kolb draws a number of distinctions between psychopathic and "normal" personalities in terms of their reaction to habit-forming drugs, especially in terms of the amount of pleasure that each personality type gets from drugs. Kolb first distinguishes types of pleasure in relation to drugs: first, the pleasure that arises out of a simple relief from pain or anxiety, which he characterizes as "negative pleasure"; and second, the pleasure that results from, as Kolb describes it, "raising an individual above his usual emotional plane" (699), or "positive pleasure" (though as soon becomes apparent, "positive" here has less-than-positive connotations). Both "normal" and "abnormal" types can experience the first kind

of pleasure, described by Kolb as "merely a reflex" (699), out of the individual's control or beyond the power of his will. However, the second type of pleasure (obviously the more dissipative or morally reprehensible type) can only be experienced by "abnormal" individuals—that is, those whom Kolb labels as "normal" don't even have the physical or emotional capability of experiencing positive pleasure. The only really interesting thing about this is Kolb's insistence that the drug only "works" or is able to seduce through pleasure those who have a personality that's defective in some way. Even if an individual appears to be normal or stable, if the drug gives them pleasure beyond the ordinary pleasure that results from the relief of pain, they apparently are hiding some abnormal traits below the surface: "It would appear from this that those individuals who are made happy by opium must have some special mental conflict that the drug relieves, even though they are not nervously abnormal in the ordinary sense" (703). As such, the measure of pleasure that results from taking drugs can serve as some sort of reverse barometer for "normalcy" or freedom from psychopathic or abnormal symptoms—the more pleasure one gets, the more abnormal one is.

What is abnormal, according to Kolb? The answers may seem reminiscent of the vague symptoms described in contemporary Prozac or Celexa advertisements that are designed to help potential customers self-diagnose: "emotional conflicts or feelings of inadequacy" (705); "a feeling of bashfulness and a disposition to be easily discouraged" (704); "persons burdened by fears, timidities, and the mental conflicts arising from the effort satisfactorily to settle abnormal impulses" (710); "devoid of moral sense" (716); one who has been "blindly coddled" by his mother (715). "The highest type of citizen," by contrast, is one who is unlikely to ever become addicted to drugs: "The highest type of

citizen is a moral individual with superior intellect balanced by a normal flow of emotions and with a personality undisturbed by nervous instability of any kind. Very few persons answering to this description ever become addicted except through the necessities of unusual stresses, and their addiction is usually quickly cured when the stress is relieved" (712). With these kinds of "normal" personalities, Kolb argues, addiction is an accident, not a deliberate choice brought on by one's moral character or faulty genetic makeup. Those with psychopathic or abnormal personalities, Kolb implies, might as well be addicted to drugs, since they're bound to get into some kind of trouble anyway: "The psychopathic nature of some of these cases was such that even without narcotics nothing but an idle, aimless life could have been expected" (722).

In Kolb's "scientific" descriptions of what today might be called "an addictive personality," it's possible to see the seeds of justification for confinement of addicts on "narcotic farms" and in prison—if, owing to their inherent personality flaws, they were bound to get in some kind of trouble anyway, they'd be better off just getting locked up. A paper by Kolb on the "relapse problem" among drug addicts cured of their addiction, introduced into the testimony (narcotic farms hearings) by a New York Representative, states that at issue was not so much the seductive power of the drug itself, but the pathological personality of the addict:

> The idea is widely held that opiates bring about a state of moral perversity that renders addicts indifferent to cure and therefore liable to relapse, or that in many cases these drugs produce some physical change that makes their continued use necessary and the impulse to return to them irresistible. It seems plain, however, that induced moral perversity has nothing to do

> with it and that physical dependence upon opium though important is, except in rare cases of prolonged addiction, only temporary and is second in importance to psychological factors in bringing about relapse to the drug. (64)

Blaming the addict for his addiction rather than the power of the drug reverses what had been a common assumption in the nineteenth and earlier in the twentieth century: that the highest percentage of people addicted were likely to be the ones who had the greatest exposure to the drug—namely, physicians and their families. Indeed, Kolb seems unable to provide an explanation about why addicts who had undergone treatment tended to relapse so readily, especially when they returned to their old environments.

In contrast to the explanation that exposure to the drug itself might have something to do with the tendency to become re-addicted, Kolb insisted that while addicts might blame their addiction on the drugs themselves for social reasons (preservation of dignity, saving face, etc.), the real reason for their dependence is "ingrained mental reasons" (64), namely, a psychopathic personality. It was these ingrained mental reasons that precipitated the dependence on the drug: "This primary psychic factor was reinforced later on by memory associations and habit and by the induced physical dependence that gradually developed. The memory associations and habit were in part created by the physical dependence" (64). Here is an interesting shift in definitions, distinguishing two things—physical dependence and habit—that had previously been defined as the same thing. In this causal chain of events, it is the "primary psychic factor" of the potential addict's personality that precipitates the drug use, creating the minor problem of physical dependence, which is reinforced by the

separate mechanisms of "memory associations" and habit. Because of difficulties with supply, addicts suffer a great deal of physical and mental pain in acquiring the drug, from which the drug itself provides relief. Thus, even when cured of the physical dependence, addicts still have strong habitual associations between pain and its relief through the drug—so they will use the drug to cure any kind of pain, not just the pains of withdrawal or craving.

Habit here thus plays a supplementary role to the physical dependence, and both only arise first from an original lack in the mental constitution of the individual. "Habit in the use of a drug is a symptom; the prolonged use of the drug causes a definite disease and habit is a result and accompaniment of disease" (77). The existence of a "primary psychic factor" is a bigger determiner of relapse in patients who had been addicted for less than a year than for those who had been addicted for a long time (in whose case habit and memory association played a greater role). However, Kolb suggests that physical dependence was more likely to be given as a cause for relapse by neurotic patients than by normal patients—thus, he says, long-term addicts who are also neurotic have little other option than to be committed (against their will, if necessary) to an institution in order to be rid of the habit: "It [physical dependence] was so important in some cases of long-standing addiction of nervous persons as to preclude the possibility of recovery by any means except enforced confinement over long periods of time" (65). Unlike the assessment of the physician thirty years before who noted that anyone who could be habituated could be dehabituated—calling attention to the essentially plastic nature of the organism—Kolb's assessment of an originary personality flaw leads to a much bleaker analysis. While attempts could certainly be made to cure the addict, most, Kolb suggests,

would fall short. Either more radical measures would have to be taken to correct the originary psychic flaw in the addict's personality, or else segregation and confinement would be required to protect the addict from his inevitable relapse into addiction.

## On the Farm: Confining the Addict's Unruly Body

H.R. 12781 was introduced in April 1928 by Stephen G. Porter, PA Representative: "A Bill to establish two United States narcotics farms for the confinement and treatment of persons addicted to the use of habit-forming narcotic drugs who have been convicted of offenses against the United States, and for other purposes." The bill establishes its reason for being as the failure of the foreign countries where drugs are produced (both raw and finished products) to control or halt shipments of the drugs to the U.S. The first six paragraphs of H.R. 12781 discuss about the unchecked production of drugs in these other countries (in violation of the Hague opium treaty of 1912). "Addict" in H.R. 12781, is defined as "any person who habitually uses any habit-forming narcotic drug as defined in this act [i.e., opium, coca leaves, and the various alkaloids derived from them, including heroin, morphia, codeine, and cocaine; also Indian hemp and its various derivatives; and peyote] so as to endanger the public morals, health, safety, or welfare, or who is or has been so far addicted to the use of such habit-forming narcotic drugs as to have lost the power of self-control with reference to his addiction" (3). This definition was later amended upon the Assistant Surgeon General's recommendation to exclude people who used the drug for legitimate medical reasons (102). The authors of the bill conceded that many addicts would not normally be criminal, but only became so in the powerful grip of the drug, but they did characterize

addicts as weak-willed and lazy: "They lack, however, the will power and resolution to give it up" (10).

The purpose for establishing the farms, to be controlled and managed by the Department of the Treasury, was twofold: first, to relieve overcrowding in federal penitentiaries, and also to place addicts in institutions where their "peculiar affliction" or disease should be treated with "scientific and humane methods" (2). In later testimony, Porter uses as an analogy the humanization of care and treatment for the "unfortunate insane" over the hundred years previous—"The fact should be recognized that drug addiction in most cases exists like insanity because of the psychoneurotic make-up and instability of the victims of drug addiction" (80). The narcotic farms ideally would, in the end, produce self-reliant citizens: "That the care, discipline, and treatment of the persons admitted to or confined in a United States narcotic farm shall be designed to rehabilitate them, restore them to health, and where necessary train them to be self-supporting and self-reliant" (3). The idea was to separate the narcotics addict out from the other criminal types, since the crimes for which the addict had been imprisoned were most often violations of the anti-narcotics laws.

But more importantly, segregation and confinement was deemed necessary because of the addicts' corrupting, viral influence on other prisoners: "It is generally conceded that a drug addict is forever seeking to recruit others to the use of drugs and that he is a source of infection in any place where numbers are gathered together in confinement" (10); as if the extremely seductive powers of the drug could work second-hand, through the drug's primary habitué—as if a bee, upon watching the dance of another bee gesturing toward a source of honey, could then fly off and communicate this

secondary information to another bee. The addict in this characterization is a virus or a zombie: "The victims of narcotics are a social menace for they not only try but succeed in spreading the disease or habit by getting others under their influence, and when they are themselves without the drugs or the means to procure them…then we find that the addict becomes much more dangerous, and will stop at nothing, no matter how indefensible and criminal, to secure the means to gratify his appetite" (10). In a separate day of testimony, Porter likened addiction to leprosy, something that requires similar quarantining measures:

> MR. WEAVER. A question occurs to me in connection with the leprosarium which the Government has established. What is the theory upon which it is operated? I know the Federal Government has come to our own State and taken a man who is not charged with crime and put him in this leprosarium.
>
> MR. LAGUARDIA. Under the quarantine measures the public health.
>
> MR. WEAVER. Could this in any way be analogous to that?
>
> MR. PORTER. Yes; it is. It is pestilential, and should be put in the same class as leprosy and diseases of that kind.

Like Woods' tropes of the oozing flows of narcotics pounding the clean borders of the U.S., the disease itself was a viral flow whose primary mode of being was to *spread*; thus, the only mode of response it allowed for was measures of control—interdiction, prohibition, legislation, segregation, confinement: the basis of an effective method of state control in the name of public health.

This chapter has examined the material effects or consequences of the shift in rhetorical definition of the habitual drug user. Of course, this isn't a one-to-one correspondence; as I demonstrated, this rhetorical shift was inextricably bound up with and configured by a complex of economic, technological, geographic, and juridical forces—so bound up that one cannot isolate a single cause as the reason why what was seen and named as a minor vice eventually became redefined as a medical problem and then a legislative one, the manifestation of a pathological subject.

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# Vita

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