

FLUID BODIES: ENERGETICS, PSYCHOANALYSIS, AND MODERNIST FORM

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By the middle of the nineteenth century the science of thermodynamics had reached such a level of complexity and sophistication that it seemed all phenomena—from the activity of physical bodies to the intricacies of human psychology to the fate of the cosmos—could be explained through its laws. While the law of conservation of energy, which proposes that energy can be transformed but neither created nor destroyed, seemed to indicate that nature was in a constant state of flux, the second law of thermodynamics revealed that these transformations will lead to the thermodynamic heat-death of the universe, where all potential energy has been actualized and all movement has ceased. Thermodynamic thought at once suggested that the cosmos is a vibrant and vital system, and threatened to reduce nature to a dead system in which all difference is replaced by equivalence. A tradition of philosophical and scientific thought, beginning with James Tyndall and Herbert Spencer, and continuing through Henri Bergson, Fredrick Nietzsche and Gilles Deleuze, draws from the terms of a debate between H.L. Mansel and J.S. Mill over the *a priori* structure of the mind in order to argue that while the forms imposed by the human intellect might condemn the universe to a heat-death, the true logic of nature, beyond knowledge and beyond the individual life of the human, is a perpetual movement of synthetic and creative forces.

Following from the observation that the body and brain are composed of the same forces and elements that are found in the material world, these grand cosmological tendencies come to inform a technical description of the human psyche. Beginning with his *Project for a Scientific*

Psychology, which works to describe psychology as the effect of the flow of energy through the brain, Freud not only appeals to thermodynamic science to give a picture of how the mind works, but relies on the idea that there are distinct tendencies that inhere in these flows of energy to theorize the broad developmental structure of human life. In his linguistic revision of Freud, Jacques Lacan takes aim at Freud's reliance on energetics, arguing that within Freud's discourse the scene of energetics functions as a fantasy that relates the subject to a locus of natural meaning. Whether as an organic cause or as a privileged fantasy, the logic of energetics frames a central problematic of psychoanalytic thought.

Within the literary tradition, the language of thermodynamics comes to situate discussions of psychology, ethics, and formal experimentation. Through readings of Walter Pater, Henry James, Oscar Wilde, Gertrude Stein, and Ludwig Wittgenstein, I argue that the impasses and expressive possibilities of thermodynamic thought become a model for the aesthetic and formal concerns of a literature that works to articulate the natural logic that situates the human.

BIOGRAPHICAL SKETCH

Daniel Wilson received a bachelors degree in English from Johns Hopkins University in 2001, and completed his PhD at Cornell University in 2012

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Introduction: The Thermodynamic Body

Over the course of the nineteenth century the science of thermodynamics evolved from a technical inquiry into the efficiency of steam engines, into a comprehensive and far reaching theory that explained everything from the logic of mechanical work and the physiology of the body, to the intricacies of the psyche, the movement of planets and stars, and the fate of the cosmos as a whole. Part of the vigor of the debates that respond to the innovations of thermodynamic thought comes from the fact that the discursive boundaries between these various fields are porous. The question of whether the universe is in perpetual movement, expanding and changing as an ever greater number of phenomena arise at the intersection of forces, or rather slowing moving towards a “heat-death,” where all differences will cease to exist, is at once taken up by physicists and metaphysicians. Since the body and mind are composed of the same forces and elements that are found in the material world, these grand cosmological tendencies come, in turn, to inform a technical description of the body and mind. The language of cosmology becomes the language of psychology.

For Walter Pater difference between normal and pathological behavior corresponds to a debate over the structure and future of the universe. For Pater, the fact that the cosmos is in “perpetual motion” suggests that “the very essence of thought [is] itself also such perpetual motion”(Plato, 13-15). In contrast, the idea of a universal tendency towards the equilibrium of a thermodynamic heat-death becomes part of a project to efface the specificity of subjective experience. A vision of the universe where all differences have vanished and all motion has stopped reduces the variety of phenomena into elements in a “long equation that had zero is equal to zero for its result” (*Imaginary Portraits*, 120). Pater argues that this fantasy of a

universal equality that replaces subjective difference is motivated by a desire to restore “the calm surface of the absolute, untroubled mind, to *tabula rasa*, by the extinction in one’s self of all that is but correlative to the finite illusion (*Imaginary Portraits*, 132). Whereas the “essence of thought” is perpetual motion, a belief in the heat death of the universe becomes a kind of psychological pathology. For the more sober minded William James, “a mind is a system of ideas” that must be maintained in “a mechanical equilibrium” (*Varieties*, 197), in order to manage an inherent “instability” of the nervous system”(*Principles*, 139). For James it is not equilibrium, but “idiosyncratic bursts of overflowing energy”(Franzese, 187), that constitute pathological behavior. For Freud, likewise, psychic structure depends on how a quantity of energy is managed. Freud argues that the infant is possessed by an undifferentiated libidinal energy. As the child grows he or she must direct this energy into socially acceptable channels. If the energy of the drive is in excess of the socially acceptable forms of expression, it is like when “a stream of water which meets with an obstacle in the river-bed is dammed up and flows back into old channels”(Dora, 44). Psychic structure depends upon how this excess energy is canalized: the hysteric and neurotic form symptoms and fantasies in order to express this energy; in the case of perversions, which “are the *negative*”(Dora, 43) of the neuroses, the subject acts on these fantasies; for the artist this redirected force provides “the energy for a great number of cultural achievements”(Dora, 43). The logic of the psyche is determined by the logic of a flow of energy.

In what follows, I begin with a reading of Freud’s appeal to scientific energetics. The language of energetics provides Freud both with a technical explanation for how the psyche functions, and with a broad theory of the developmental tendencies of the subject. This scene of natural energies comes to provide the structure of Freud’s metapsychology. In his linguistic

revision of Freud, Jacques Lacan takes aim at Freud's reliance on energetics, arguing that within Freud's discourse energetics functions as a fantasy that relates the subject to a locus of natural meaning. For both Freud and Lacan, the question of natural energy is at the center of a psychoanalytic metapsychology. I then turn to offer a brief history of how, within an influential tradition of nineteenth century philosophy, the science of energetics comes to be the language of nature, a language that, because it situates human activity and thought, is taken to exist beyond the limits of the intellect. Finally, I suggest that a certain tradition of literary modernism—which passes through Walter Pater, Henry James, Oscar Wilde, D.H. Lawrence and Gertrude Stein—derives its aesthetic and formal concerns from the impasses and expressive possibilities of thermodynamic thought.

I. Freud's Energetics

Sigmund Freud begins his early *Project for a Scientific Psychology* by declaring that “the intention of this project is to furnish us with a psychology which shall be a natural science: its aim, that is, is to represent psychical processes as quantitatively determined states of specifiable material particles and so to make them plain and void of contradiction” (355). Freud continues that “the material particles in question are the neurons” (355), and that these neurons are invested with a quantity of energy. The flow of energy through these neurons is guided by a principle of “neural inertia”—modeled after the thermodynamic principle of the conservation of energy—that dictates that each neuron divests itself of energy by passing the quantity of energy on to the next neuron, in order to return to a state of equilibrium. The entire neural system, governed by this principle, works to maintain itself in a state of equilibrium.

When a simple organism perceives a stimulus it takes energy in from the environment through its sensory nervous system, and then expels it through its motor nervous system. The case changes slightly for complex organisms such as humans. “As the internal complexity of the organism increases, the neuron system receives stimuli from the somatic element itself—endogenous stimuli, which cause equally for discharge” (357). To satisfy these endogenous stimuli—such as “hunger, respiration and sexuality” (357)—the organism must “learn to tolerate a store of quantity [of energy] sufficient to meet the demands for specific action” (358). While some tension must be reserved within the “neuron system,” in order to meet these endogenous needs, the system still works “to keep its level of tension constant” (358). Freud argues that the phenomena of hysterical or neurotic symptoms, which present as eruptions of energy in excess of any environmental cause, come when this store of energy, within the neural system, cannot find its proper expression. Freud thus gives the example of an hysterical woman who is “under a compulsion not to go into shops alone”(410). This compulsion is caused by two repressed childhood memories. In the first, two shop assistants, one of whom “attracted her sexually”(410), were “laughing at her clothes”(410); in the second, “she had gone into a shop to buy some sweets and the shopkeeper had grabbed her genitals through her clothes”(411). She has an unexplained fear because the idea of going into a shop alone “passes through a number of unconscious intermediate links”(413). Since the neural system works to keep the level of energetic tension constant, the quantity of energy, stored in response to these two events, exerts its presence through unconscious associations. Because it has not been allowed any direct expression, a wholly appropriate reaction to two traumatic events troubles the hysteric every time she thinks of going into a shop alone. The talking cure allows the direct expression of the energy stored in response to these experiences. Once Freud’s hysteric uncovers the experiences she has

repressed she can distinguish between shopkeepers, who should not elicit an affective response, and the sexually charged situations to which she should, indeed, respond.

It is in terms of this labor to explain psychic phenomena in terms of the equilibrium of an energetic system that Jacques Lacan writes of Freud's debt to nineteenth century scientism. For Lacan, it is Freud's

allegiance to the ideals of Brücke, themselves passed down from Helmholtz and Du Bois-Reymond's pact to reduce physiology, and the mental functions considered to be included therein, to the mathematically determined terms of thermodynamics (the latter having attained virtual completion during their lifetimes)—that led Freud, as his writings show, to pave the way that shall forever bear his name. (*Écrits*, 728)

For Lacan, in other words, it is only because of Freud's adherence to the science of energetics that Freud is able to develop psychoanalysis. The relationship of Freud's unconscious to thermodynamics, as well as the importance of Freud's scientism to Lacan's reformulation of the Freudian unconscious, takes us to the scene of nineteenth century thermodynamics, where a rigorous rationalism, which reduces phenomena to mathematically determinable terms, is conjoined with an at times mystical speculation into the natural logic that governs these mathematical relationships.

As Lacan suggests, the project to reduce physiology to the “mathematically determined terms of thermodynamics,” is often thought to originate with Hermann von Helmholtz. In his 1862 public lecture, “The Application of the Law of the Conservation of Force to Organic Nature,” Helmholtz argues that the laws of thermodynamics show the path by which the fundamental problems of human life can be resolved through experimentation. Rather than assume that a vital motive power separates living organisms from mechanical processes, Helmholtz argues that the science of energetics shows that human physiology is organized through the same processes, and is governed by the same laws, that describe mechanical work.

At the beginning of this century, physiologists believed that it was the vital principle which caused the processes of life, and that it detracted from the dignity and nature of life if anybody expressed his belief that the blood was driven through the vessels by the mechanical action of the heart, or that respiration took place according to the common laws of the diffusion of gasses. The present generation, on the contrary, is hard at work to find out the real causes of the processes that go on in the living body. They do not suppose that there is any other difference between the chemical and the mechanical actions in the living body and out of it than can be explained by the more complicated circumstances and conditions under which these actions take place, and we have seen that the law of the conservation of force legitimizes this supposition. This law, moreover, shows the way in which this fundamental question, which has excited so many theoretical speculations, can be really and completely solved by experiment. (121)

It is in indeed in these programmatic terms that Freud takes up and extends the experimental plan that Helmholtz articulates, by explaining the intricacies of psychology through reference to the system of mathematically determined quantities of energy. In his 1927 essay “The Question of a *Weltanschauung*,” written some fifty years after Helmholtz’s lecture, Freud suggests that the *Weltanschauung* of psychoanalysis is nothing other than this experimental program. Freud writes that psychoanalysis “is quite unfit to construct a *Weltanschauung* of its own: it must accept the scientific one” (196), which “assumes the uniformity of the explanation of the universe [...] as a programme, the fulfillment of which is relegated to the future” (196). What science asserts as a “programme” is “that there are no sources of knowledge of the universe other than the intellectual working-over of carefully scrutinized observations—in other words, what we call research—and alongside of it no knowledge derived from revelation, intuition or divination”(196). The ethics of the *Weltanschauung* of science, as part of a psychoanalytic labor, thus involves a critique of any non-scientific *Weltanschauung*, and the imposition of “a dictatorship of reason” (198) in its place. It would be difficult to understate the importance of this thermodynamic project for Freud’s writings. The central structural elements in Freud’s metapsychology—the language of primary and secondary processes, the ego, id, and superego—

all emerge out of the language of neural energetics that Freud first puts forth in the *Project*. Expanding on Helmholtz's declaration that the circulation of the blood can be understood according to the "mechanical action of the heart"(121) or that respiration takes place "according to the common laws of the diffusion of gasses"(121), Freud argues that psychic as well as social structures exist in order to manage the energy of the drive. As he writes in *The Psychopathology of Everyday Life*, "a large part of the mythological view of the world, which extends a long way into most modern religions, is nothing but psychology projected into the external world [...] One could venture to explain in this way the myths of paradise and the fall of man, of God, of good and evil, of immortality, and so on, and to transform metaphysics into metapsychology" (SE 6:256). Freud finds the real causes of hysteria and neurosis, as well as group psychology, myth, and religion, through a metapsychological model of flows of energy that pass through the structures of the brain.

And yet alongside Freud's allegiance to Helmholtz's scientific program, there is a second thermodynamic heritage in Freud's thought. In his description of a scientific *Weltanschauung* as a research program, Freud seems to embrace scientific discourse as an epistemological, rather than as an ontological, program. J.S. Mill, whose logic was hugely important to the development of nineteenth century science, and whom Freud both referenced and translated, argues that in order for scientific thought to proceed, it does not need to make any assumptions about the universal structure of the natural world. For Mill, the specific study of the relationships between particular observations is all that is required to investigate the world of phenomena. As Richard Rorty writes, Mill's argument that a study of particulars could lead to laws did "for science what the utilitarians had done for morality—making it something you could use instead of something you could merely respect"(308). The utility of scientific thought does not require, for Mill, that

we assume that the laws inhere in the material structure of the natural world. Yet at the same time that Freud, following from Helmholtz, seems to adhere to this purely critical notion of scientific thought, to the imposition of a “dictatorship of reason” through which laws can be constructed out of observations, Freud is equally influenced—through his collaboration with Wilhelm Fliess—by a tradition of thought that takes these exchanges of energy as an ontological fact.

Freud’s *Project* was first conceived of as a shared project with Fliess, whose 1897 study, *The Relation Between the Nose and the Female Sex Organs, Presented in their Biological Significance* moves from the visual resemblance between the structure of bone and tissue in the nose and female genitalia, to the seemingly functional resemblance (in that each involves a spontaneous flow of blood) between a nosebleed and a menstrual period, to a universal theory of flows of energy that periodically traverse the human body. As Serge André writes, even more astonishing than the speculative fervor of Fliess’s theory is that “Freud, who in early 1896 was the first reader of this manuscript, had virtually no objections to this ‘nose-genital,’ as he called it. On the contrary, he sang its praises, extolling its brilliance and originality and finding nothing to amend” (29).

Fliess argues, through an impressive series of tables that chart the dates of important incidents in patients’ lives—from menstrual flows and nosebleeds to migraines, anxiety attacks, and dates of birth and death—that these phenomena are the expression of periodic flows of a universal sexual energy. These flows occur in two periods, and Fliess, as he writes, has “named the series of twenty eight days ‘feminine’ and the series of twenty three days ‘masculine’”.¹

¹ Fliess’s study is unfortunately not translated into English. The translations are my own, from the French translation of Fliess’s German. “Nous avons sans rien préjuger, nommé féminines les séries de vingt-huit jours et masculines les séries de vingt-trois jours”(254)

Anxiety “is produced at periodic days” if these flows are not allowed expression. Aligning his theory with Freud's idea of repression, Fliess writes that anxiety occurs only when this flow is repressed.

The sexually mature man, who is able to entirely satisfy his reproductive instinct, does not experience anxiety. The excitation finds its normal expression, and through this expression its balance. But in the circumstances defined by Freud, if this balance is imperfect, a part of this unspent substance accumulates and resurges, transformed into anxiety. It is a little like electrical force that, when resistance is opposed, accumulates and then finds its balance in periodic discharges that produce effects like light and heat, or even motor effects that would not have appeared if the current had not been restricted. (238)²

Fliess's cure for a wide range of emotional as well as physical problems is thus to bring the patient into rhythm with these universal flows, by applying cocaine to the mucous membrane of the nose in order to encourage the correct discharge of energy.

For Fliess, as for Freud, hysterical or neurotic symptoms come when an excess of energy is stored and is unable to release its energy back into the environment. The problem of cathexis, for both Freud and Fliess, thus has to do with finding a way to release this reserve of energy and to thus reintegrate the energy that is stored up in the symptom into the flow of energy that passes into and out of the subject. Just as Fliess's cocaine treatments allow the patient to express the periodic flow that traverses his body, for Freud, cathexis allows the patient to reintegrate the excess energy that is stored in the symptom back into the environment. And yet, in terms of

² “L'homme sexuellement mûr, que est en mesure de satisfaire entièrement à l'instinct de reproduction, n'a pas d'angoisse. L'excitation trouve son expression normale et par là son équilibre. Mais dans les conditions définies par Freud, si l'équilibre est imparfait, une partie de la substance non dépensée s'accumule et finit par resurgir sous la forme transformée de l'angoisse. Un peu comme la force électrique qui, lorsqu'une grande résistance lui est opposée, s'accumule et s'équilibre en décharges périodiques produisant des effets tels que la lumière et la chaleur, ou encore des effets moteurs que n'apparaîtraient pas si le courant n'était pas entravé”(238).

Freud's *Project*, whereas Fliess argues that each human's life is determined by the periodic expressions of this force, and that the fundamental reality of human life is determined by this flow of energy, Freud emphasizes the technical processes through which energy passes through neurons. The true heritage of Fliess's theory emerges, however, when Freud moves to consider the psychic development of the human.

In his 1905 *Three Essays on the Theory of Sexuality*, which describe the sexual development of the infant and child, Freud notes that, while “the germs of sexual impulses are already present in the new-born child and that these continue to develop for a time,” these impulses are occasionally “overtaken by a progressive process of suppression,” which is, in turn, interrupted by “periodical advanced in sexual development”(42). As Freud continues, while ‘one gets the impression from civilized children that the construction of these dams is a product of education, and no doubt education has must do to with it [...] in reality this development is organically determined and fixed by heredity’(43). It is through Fliess’s notion of the periodic flows of sexual energy that Freud understands this organic determination. As Freud writes, “it is from Fliess that I have borrowed the term ‘period of sexual latency’”(44). When Freud writes of the advancement and suppression of the “sexual impulses” as the expression of “the regularity and periodicity of [an] oscillating course of development”(42), both his logic and language are borrowed from Fliess. In other words, when Freud speaks of a “period” of latency, he is not merely speaking of a “period” as an interval of time, but rather a cycle of the oscillation of a periodic flow. The logic of the psychosexual development of the human emerges as the expression the logic of the Fliess's flow.

In the 1909 postscript to the section “The Scientific Literature on Dreams,” in *The Interpretation of Dreams*, Freud writes that Hermann Swoboda's “treatment of the problems of

dreams”(126), derived from Fliess’s theory, comes nearest to Freud's own theorization of dreams. Swoboda, writes Freud,

has undertaken the task of extending to psychical events the discovery of biological periodicity (in 23-day and 28-day periods) made by Wilhelm Fliess. In the course of his highly imaginative work he has endeavored to use this key for the solution, among other problems, of the riddle of dreams. His findings would seem to under-estimate the significance of dreams; the subject-matter of a dream, on his view, is to be explained as an assemblage of all the memories which, on the night on which it is dreamt, complete one of the biological periods, whether for the first or for the *n*th time. (126)

Freud’s evocations of Fliess’s logic, throughout his work, are invariably accompanied by a critique of the rigor of Fliess’s formulas. Whereas for Fliess the periods which inform human life are precise, Freud insists that “nothing is known for certain concerning [their] regularity and periodicity”(*Three Essays*, 42). The mistake that Swoboda, and by extension Fliess, make, is to over-estimate the precision through which these periods can be known. While Freud shifts the emphasis away from the decoding of biological periods in dreams, to an engagement with the specific material exposed in dreams, this specific material is, itself, organized by an organic logic.

This surprisingly slight difference between Freud and Fliess emerges again and again in Freud’s writings. While psychoanalytic material corresponds to a natural logic of periodicity, Freud equally insists that it is a mistake to refer to the logic of this periodicity rather than to examine the actual material. It is this emphasis on the biological determination of structure that is at stake when Freud considers the question of the reality of the primal scene, is his case study on the ‘Wolf-Man.’

I should myself be glad to know whether the primal scene in my present patient's case was a phantasy or a real experience; but, taking other similar cases into account, I must admit that the answer to this question is not in reality a matter of very great importance. These scenes of observing

parental intercourse, of being seduced in childhood, and of being threatened with castration are unquestionably an inherited endowment, a phylogenetic inheritance, but they may just as easily be acquired by personal experience. [...] All that we find in the prehistory of neuroses is that a child catches hold of this phylogenetic experience where his own experience fails him. He fills in the gaps in individual truth with prehistoric truth; he replaces occurrences in his own life by occurrences in the life of his ancestors. I fully agree with Jung in recognizing the existence of this phylogenetic inheritance; but I regard it as a methodological error to seize upon a phylogenetic explanation before the ontogenetic possibilities have been exhausted. (*Three Case Studies*, 256-7)

The fact that the primal scene could be a “phantasy,” rather than a “real experience,” does not mean, as in Lacanian theory, that the primal scene is a linguistic construction, sustained by its own logic. Rather, Freud suggests that the primal scene either refers to the patient’s “own experience” or to the “phylogenetic inheritance” which makes up for the holes in the patients experience. If the primal scene has no reality, then it is a fantasy, but the truth of the fantasy comes from the fact that the fantasy refers to a prehistoric, phylogenetic scene. Jung, who Serge André suggests was fully under the thrall of Fliess’s theory of universal flows of energy, emphasizes the phylogenetic inheritance—the fantasy—as the cause of the patient’s development. While Freud does not doubt that a phylogenetic prehistory determines the logic of the primal scene, he is interested in the specific manner in which the primal scene is experienced by the subject.

The importance of Fliess’s oscillating energies, and Freud’s negotiation of the relationship between biological determination and personal experience, is perhaps nowhere as apparent as in *Beyond the Pleasure Principle*, where Freud argues that all organisms work to return to an original unperturbed state, before the integrity of the organism was violated by the intrusion of the external world. Whereas in the *Project*, the principle of inertia describes the tendency of neurons to divest themselves of quantities of energy, in *Beyond the Pleasure*

Principle, the notion of “an inherent inertia in organic life” comes to regulate the totality of organic life.

It seems, then, that an instinct is an urge inherent in organic life to restore an earlier state of things which the living entity has been obliged to abandon under the pressure of external disturbing forces; that is, it is a kind of organic elasticity, or, to put it another way, the expression of the inertia inherent in organic life. (43, emphasis is Freud's)

While Freud appeals to a wide range of biological texts in order to argue that the reproductive impulses—the pleasure principle—serves not to perpetuate life, but rather to bring the organism back to its initial, inanimate, state, the notion that the entirety of organic life is determined by a principle of energetic equilibrium seems clearly indebted to Fliess. In introducing this universal conception of organic life, Freud again appeals to Fliess.

According to the large conception of Wilhelm Fliess, all the phenomena of life exhibited by organism—and also, no doubt, their death—are linked with the completion of fixed periods, which express the dependence of two kinds of living substance (one male and the other female) upon the solar year. When we see, however, how easily and how extensively the influence of external forces is able to modify the date of the appearance of vital phenomena (especially in the plant world)—to precipitate them or hold them back—doubts must be cast upon the rigidity of Fliess's formulas or at least upon whether the laws laid down by him are the sole determining factors. (54)

As in his rejoinder to Jung, over the question of the reality of the primal scene, Freud suggests that the specific experience of the organism is able to modify the manner in which a natural logic determines the organism. As a plant might bloom sooner if there is an early spring, the specific experiences of the subject might affect how the principle of inertia—the death drive—influences his life. It is, again, not the notion of a periodic oscillation of energy that Freud objects to, but to the notion that these periods are fixed and unmodifiable. The logic of the death drive, like that of the fantasy in its reference to a phylogenetic truth, might be modified the specific experiences of an individual subject; the structure that is modified, however, emerges out of an ontology of the

flow of energies, out of the periodic eruptions of an oscillating scene of energy. This scene of energies becomes the other scene of the unconscious.

Lacan agrees with Freud that the structure of the fantasy is the structure of thermodynamics, however he inverts the causal relationship between these terms. For Lacan it is not the structure of energetics that provides the truth of the fantasy, but, rather, the structure of the fantasy that provides the truth of energetics. Whereas for Freud the fantasy responds to the truth of periodic flows of energy, Lacan argues that the thermodynamic explanation of the human is itself a fantasy that responds to the fact that the human body, as Serge Andre writes, is “affected by the structure of language in which the human being lives and in which he takes possession of (and also disowns), his body” (273).³ Lacan argues that human only takes possession of his or her body within language; in these terms the fantasy is the structure that organizes the body in a relationship to the Other. The thermodynamic scene, as a theorization of the forces that hold and organize the body, is itself a fantasy.

Lacan will theorize the problem of the body through his mirror stage. Lacan argues that the child, who is born helpless and “premature” (*Écrits*, 77) lacks the ability exert muscular control over his disorganized body. The child first comes into possession of his body when he identifies not with the experience of this disorganized body, but with the unified image, in the mirror, that he sees his mother looking at. The child who passes through the mirror stage exchanges the subjective experience of his disorganized body for the unified, organized, but ultimately alien image that he sees in the mirror. It is only because of the mother, who appears as an “Other,” that the body takes on its coherence. It is in these terms that, for Lacan, Freud’s

³ « le corps de l'être humain est lui-même affecté par la structure, c'est-à-dire affecté par la structure de langage dans laquelle il habite et dans laquelle il prend possession (et dépossession) de son corps »

appeal to scene of energetics, as a natural organization and logic of the body, covers over the real experiences of the fragmented body.

Whereas Freud bases his metapsychology on the logic of flows of energy, and describes the labor of psychoanalysis as the investigation into how it is that this metapsychological structure insists within the specific experience of the subject, for Lacan metapsychology begins with the experience of the body fragmented by the signifier. Elevating the problem of linguistic structure over the natural structure of energy, Lacan thus insists that energy is not natural, but rather “a numerical constant”(*Television*, 18), produced within a network of mathematical signifiers. As Lacan writes, “without this constant, which is merely a combination of calculations [...] you have no more physics. It’s generally thought that that’s the physicists’ business and that they adjust the equivalences between masses, fields, and impulses so that a number gets pulled out that complies with the principle of the conservation of energy”(18). Energy is not the natural logic of the material world, but a system of order imposed by the signifier. This shift constitutes an essential difference between Freud’s metapsychology and Lacan’s metapsychology. Whereas Freud’s appeal to the science of thermodynamics establishes the scene and logic of these flowing energies as the structural cause of the human, for Lacan the scene of energetics is the fantasy of another scene that explains all that is at stake for the human. Energy is a fantasy, but a privileged fantasy, for it is through an engagement with the problems of thermodynamic thought that, within a certain philosophical tradition to which both Freud and Lacan are indebted, the language of being is revealed.

II. The Other Scene of Thermodynamics

On the one hand, the discovery of the thermodynamic processes that govern both organic and inorganic nature seems to further a disenchantment of the natural world that began with the theoretical and technical achievements of the scientific revolution. Carolyn Merchant, the feminist ecologist and historian of science, argues that over the course of the scientific revolution the vision of nature as an organic system was carved up by the mechanizing discourse of science. “In 1500 the parts of the cosmos were bound together as a living organism; by 1700 the dominant metaphor had become the machine”(288). As Merchant continues, “the changes in imagery and attitudes relating to the earth were of enormous significance as the mechanization of nature preceded. The nurturing earth would lose its function as a normative restraint as it changed to an inanimate dead physical system”(22). In Merchant’s narrative, the organic body of nature is subjected to a will to power and administration that puts nature to work for man. Yet at the same time, within the nineteenth century philosophical tradition that negotiates the thermodynamic discovery that the human can be integrated into a fully mechanized nature, the logic of this mechanized nature reveals what the English scientist and author James Tyndall calls the “miracle of vitality”(Tyndall, 465).

In his *Heat as a Mode of Motion*, published in the same year as, and drawing from, Helmholtz’s lecture on thermodynamics and organic nature, Tyndall writes that “the engine and the animal derive, or may derive, these powers from the self-same source”(463).

We can work an engine by the direct combustion of the substance which we employ as food; and, if our stomachs were so constituted as to digest coal, we should, as Helmholtz has remarked, be able to derive our energy from this substance. The grand point permanent through all these considerations is, that nothing is created. (463)

Yet whereas for Helmholtz the “fundamental question” of life, which was described as a “vital principle” (Helmholtz, 121) by pre-thermodynamic physiologists can be demystified through rigorous scientific experimentation, for Tyndall the experimentally verified fact that the same forces constitute the organic and the inorganic constitutes a mystery.

The matter of our bodies is that of inorganic Nature. There is no substance in the animal tissues which is not primarily derived from the rocks, the water, and the air. Are the forces of organic matter, then, different in kind from those of inorganic? All the philosophy of the present day tends to negative the question; and to show that it is the directing and the compounding, in the organic world, of forces belonging equally to the inorganic, that constitute the mystery and the miracle of vitality. (Tyndall, 465)

The law of conservation of energy—the perpetual transformations of energy and heat—becomes the principle of a pantheistic religion of nature. At the same time that living body becomes part of the material world, the logic of the material world, governed by “the law of the conservation of force” comes, itself, to take the place of the “vital principle.” The unity of the vital body, first decomposed into the network of forces that link the body to the natural world, reemerges as the vital system of fluid exchanges of energy within the universe.

The shift in emphasis between Helmholtz’s appeal to a scientific *Weltanschauung* through which the fundamental problems of the human can be solved, and Tyndall’s mystification of the totality of processes of thermodynamic exchange as constituting the “mystery and the miracle of vitality”(465) was a central preoccupation of nineteenth century English philosophy of science. This tradition, however, did not merely appropriate the logic of thermodynamic exchanges, for the articulation of a vital thermodynamic nature required that the logic of thermodynamics be reconfigured. In the terms of this philosophical tradition, while the principle of conservation of energy suggested that the universe was itself vital, the second law of thermodynamics, which predicted the heat-death of the universe, seemed to once again reduce

the universe to a sterile machine. As Sergio Franzese writes, in his concise articulation of the problematic, while the law of conservation of energy seemed to offer an appealing logic of transformation, it was “haunted” by the problem of the dispersion of energy.

Starting from the technological problems posed by the improvements of steam engines, physicists discovered the fundamental laws governing the transformation, conservation, and dissipation of energy, the second law of thermodynamics, or entropy, and posited the heat death of the universe. These concepts became the driving force behind a major philosophical debate. It is important to note that the theory of energy, or “force”, was haunted from the very beginning by the question of the dispersion of energy; that is, since Sadi Carnot's studies on the ideal engine in 1824. (*Ethics of Energy*, 148-9)

What Carnot's studies revealed, which would be formalized by William Thomson in his in his 1852 paper, “On a Universal Tendency in Nature to the Dissipation of Mechanical Energy,” was that while heat could be used to produce motion, a certain amount of energy dissipates through friction, and thus cannot serve to produce further motion. As potential energy is actualized, the amount of potential energy in the universe tends towards a state of exhaustion. The sun will extinguish, motion will cease, and the universe will rest in a state of unperturbed equilibrium.

As Thomson writes:

I believe the tendency in the material world is for motion to become diffused, and that as a whole the reverse of concentration is gradually going on—I believe that no physical action can ever restore the heat emitted from the sun, and that this source is not inexhaustible; also that the motions of the earth and other planets are losing *vis viva* which is converted into heat; and that although some *vis viva* may be restored for instance on the earth by heat received from the sun, or by other means, that the loss cannot be precisely compensated and I think it probably that it is undercompensated. (quoted in Sharlin, 112)

The universe itself is a “less-than-perfect” engine, exhausting a limited supply of *vis viva*. To nineteenth century thinkers, the metaphysical consequences of this heat-death were immediately apparent.

Thomson was both the foremost English physicist of the mid-century, and a staunch Scottish Presbyterian. The heat-death of the universe allowed him to reconcile these two discourses, for Thomson saw the heat-death of the universe as scientific proof of a biblical cosmology. Since the universe has an end, he argued, the universe must have had a beginning; since the universe had a beginning, it must have had a creator. As Crosbie Smith writes, for Thomson this thermodynamic proof of Christian cosmology became the basis for a religious ethics.

The directional flow of energy through space offered human beings the opportunity of directing, though not restoring, those mighty gifts of the Creator, the energies of nature. But such an irreversible tendency was not 'loss' of energy in the material world. Human beings had a duty to employ engines for the benefit of mankind and in aid of its commercial and moral 'progress.' Failure to properly direct and harness those gifts of energy was therefore only a waste, and in that sense a sin of 'dissipation,' with respect to human beings rather than in nature. (Smith, 101)

Not only did the heat death of the universe seem to prove that the universe had a beginning and an end, and therefore a creator, but it allowed Thomson to define the field of ethical action in terms of a utilization of the gifts of energy.

Whereas for Thomson the science of thermodynamics was evidence of a Christian cosmology and ethics, the transformative logic of thermodynamic thought equally seemed a powerful tool, along with Darwinian evolution, in the articulation of a secular materialism. As Smith writes, James Tyndall "was quick to perceive the value of conservation of energy in the armoury of scientific naturalism" (183). However, "in order to appropriate the doctrine for these ends, he needed to break any perceived North British monopoly on physical truth" (Smith, 182). In order to claim the science of thermodynamics for a secular scientific naturalism, Tyndall appealed to the work of the German physicist Julius Robert von Mayer to articulate a thermodynamics of perpetual motion that severs the transformative logic of the first law of

thermodynamics from the theological consequences of the heat-death of the universe.

Tyndall's *Heat as a Mode of Motion* must thus be read as a rhetorical intervention in the quasi-philosophical, quasi-theological, field of cosmological questions raised by the dominant science of thermodynamics. Throughout the book, Tyndall argues, against a notion of entropic decline, that conversion of heat into motion is fully reversible, and that useful heat can be produced by friction. As he writes: "All the force of our locomotives is derived from heat, and all of it eventually becomes heat" (8).

The energy of heat in the furnace passes into the mechanical motion of the train, and this motion reappears as heat in the wheels, axles, and rails. When a station is approached, say at the rate of thirty miles an hour, a brake is applied, and smoke and sparks issue from the wheel on which it presses. The train is brought to rest—How? Simply by converting the entire moving force which it possessed at the moment the brake was applied, into heat. (9)

While for Thomson the fact that the locomotive is, itself, an imperfect heat engine, means that the heat that results from friction is "lost" to humans, Tyndall argues that friction, when examined at a macroscopic level, allows the full retransformation of mechanical energy into useful motive force.

To combat a notion of friction as the loss of heat, Tyndall proposes "another theory" that "deserves our serious attention—the Meteoric Theory of the Sun" (445), by which he argues that the energy expended by the sun is restored to the sun by the heat generated through friction when meteors collide with it.

In the fall of asteroids we find the means of producing the solar light and heat. It may be contended that this showering down of matter necessitates the growth of the sun; it does so; but the quantity necessary to maintain the observed calorific emission for 4,000 years would defeat the scrutiny of our best instruments. If the earth struck the sun, it would utterly vanish from perception; but the heat developed by its sock would cover the expenditure of a century. (447)

First proposed by Mayer in 1848, the “Meteoric Theory” was one of a series of theoretical endeavours to explain the continuing heat of the sun, for if the sun was considered merely as a burning mass of coal—as Tyndall writes, the temperature of the sun “transcends all terrestrial combustion”(447)—then the diminution of heat coming from the sun would be observable over the course of a single lifetime. While for Mayer the frictional heat generated by asteroids colliding with the sun merely slows the inevitable heat death of the universe, for Tyndall it becomes the mechanism through which the universe is transformed into a perpetual motion machine. Since in the heat death of the universe, it is heat lost to friction that is responsible for the dissipation of energy, by finding, in friction, a replenishment of the “*vis viva*” of the universe, the problem of dissipation is solved. The “Meteoric Theory” secularizes the universe by effectively deanthropomorphizing the universe. Not only does the meteoric theory turn the universe into a system in perpetual motion, but the possible extinction of humanity, in the chance that the earth would be pulled into the sun, becomes the mechanism through which the universe continues to exist as a system of active energies.

At the same time that Tyndall was working to sever the law of conservation of energy from the eschatological and religious consequences of the second law of thermodynamics, Herbert Spencer, as part of the same broad project, took a distinct approach. In his *First Principles* Spencer appeals to the quasi-Kantian distinction, developed by Sir William Hamilton and Henry Longview Mansel, between nature as it is known through law, and nature as it operates outside of law. As Bernard Lightman writes, with distinctly mixed praise, “Mansel may have been the closest equivalent to Kant which Victorian England could produce” (32). While Mansel carried the mantle of Kant’s critical philosophy in England, his appropriation and extension of Kant’s logic results in a profound alteration of Kant’s thought. Mansel follows Kant

in arguing that there are *a priori* laws that govern or “condition,” thought. However, he preserves the existence of an “unconditioned” reality beyond these laws. As Lightman writes, Mansel's “main assumption was that the mind is compelled to think under certain laws that it cannot transgress”(59). Because the mind is compelled to think in accord with certain laws, the possible objects of thought must correspond to those laws. As Mansel writes, “if our whole thinking is subject to certain laws, it follows that we cannot think of any object, not even of Omnipotence itself, except as those laws compel us”(PL, 72). Yet at the same time that we must acknowledge that thought is limited by the *a priori* logic that conditions the objects of thought, Mansel insists that philosophy must assume a position with respect to the unconditioned reality that lies beyond thought. Where Kant goes wrong, according to Mansel, is in assuming that there is no relationship between reality as it is conditioned by thought, and the unconditioned beyond.

When Kant declares that the objects of our intuitions are not in themselves as they appear to us, he falls into the opposite extreme to that which he is combating: the Critic becomes a dogmatist in negation. To warrant this conclusion, we must previously have compared things as they are with things as they seem; a comparison which is, *ex hypothesi*, impossible. We can only say, that we have no means of determining whether they agree or not. (PL, 74).

This “dogmatic” overstepping of the boundaries of thought can only be overcome by assuming the existence of an “unconditioned Absolute” as the beyond of human thought, an “Absolute” that may be—for who is to say it is not—in some relationship to our intuitions of reality.

Rigorously following Mansel's quasi-Kantian distinction between reality as it is “conditioned” by the *a priori* laws of mind, and the “unconditioned” reality that exists outside of these laws, Spencer distinguishes between the “Known”—a scene of force ruled by the laws of thermodynamics and tending towards a heat death—and the “Unknowable”—the scene of an

“Absolute” and “Unlimited” force. The first section of Spencer's book, entitled “The Unknowable,” attempts to reconcile science and religion by showing that each discourse, taken to its limit, leads us to the problem of the first cause. As Spencer writes, “In our search after causes, we discover no resting place until we arrive at a First cause; and we have no alternative but to regard this First Cause as Infinite and Absolute. These are inferences forced on us by arguments from which there appears no escape” (28-29). Both religion and science, because they are conditioned by *a priori* laws, can only articulate the manner in which phenomena are organized within thought, they cannot say anything about the cause of these phenomena.

Spencer concludes, following Mansel, that thought cannot rest with the limits of the “Known.” Spencer writes that

the error, (naturally fallen into by philosophers intent on demonstrating the limits and conditions of consciousness,) consists in assuming that consciousness contains *nothing but* limits and conditions; to the entire neglect of that which is limited and conditioned. It is forgotten that there is something which alike forms the raw material of definite thought and remains after the definiteness which thinking gave it has been destroyed. (67)

Just as we must respect the limits of conditioned reality, we must avoid the dogmatic belief that there is nothing but the limits of consciousness. Both Hamilton and Mansel, as Spencer notes, write of the Absolute as a belief.

If the Non-relative or Absolute is present in thought only as a mere negation, then the relation between it and the Relative becomes unthinkable, because one of the terms of the relation is absent from consciousness. And if this relation is unthinkable, then is the Relative itself unthinkable, for want of its antithesis: whence results the disappearance of all thought whatever. (68)

The only way that thought can be preserved, the only way to maintain the relative and limited nature of all thought, is through the postulation of an “Absolute.” If we assume that unconditional reality has no relation to the laws of thought, then, as Mansel suggests, there is an

overreaching of thought, for one must assume that the world of thought is in a relation (of negation) to that which is unthinkable (noumenal reality).

Unless a real Non-relative or Absolute be postulated, the Relative itself becomes absolute, and so brings the argument to a contradiction. And on watching our thoughts we have seen how impossible it is to get rid of the consciousness of an Actuality lying behind Appearances; and how, from this impossibility, results our indestructible belief in that Actuality. (72)

Therefore, Spencer concludes, “we are obliged to regard every phenomenon as a manifestation of some Power by which we are acted upon; though Omnipresence is unthinkable, yet, as experience discloses no bounds to the diffusion of phenomena, we are unable to think of limits to the presence of this Power; while the criticism of Science teach us that this Power is Incomprehensible” (73).

In “The Knowable,” Spencer argues that the shared tasks of both philosophy and science is to articulate a “*completely-unified knowledge*” (104), and that the limit of what can be known by science and philosophy can be described in the language of the first and second laws of thermodynamics. Spencer's analysis of philosophy and science leads him to propose that the ultimate term of knowledge is “force,” where “evolution” is the study of the transformations of force. Spencer is thus able to propose an ultimate law, as the limit of what can be known about reality:

Evolution is an integration of matter and concomitant dissipation of motion; during which the matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity; and during which the retained motion undergoes a parallel transformation. (321, emphasis is Spencer's)

The consequence of this law is indeed that the universe is progressing towards an entropic heat-death. “There is a progress towards equilibrium,” and, Spencer writes, the transformation of forces will eventually “result in the cessation of motion” (392). Yet, because of his distinction

between the “Known” and the “Unknowable,” the fact of this law does not, itself, suggest that the universe is proceeding towards a heat death. “Force, as we know it, can be regarded only as a conditioned effect of the Unconditioned Cause—as the relative reality indicating to us an Absolute Reality by which it is immediately produced” (133). Therefore, our knowledge of force—as ruled by the laws of thermodynamics and tending towards heat-death—is merely a symbol of “the persistence of some Cause which transcends our knowledge and conception [...] without beginning or end”(154-5). Thus, while as far as we know, the universe is going to end, it may be the case that an unknown source of energy will provide a continual motive force. As Spencer writes, “we cannot draw such a conclusion without tacitly assuming something beyond the limits of possible knowledge, namely, that the energy contained in our Sidereal System remains undiminished”(431). It is possible that, beyond the limits of our solar system, there exists an inexhaustible source of energy. Spencer thus concludes that “it is not inferable from the general progress towards equilibrium that a state of universal quiescence or death will be reached; but that if a process of reasoning ends in that conclusion, a further process of reasoning points to renewals of activity and life” (431). The Unknowable becomes the scene of an infinite and absolute energy, an energy ruled by neither a law of equilibrium nor entropy. The scene of perpetual motion that Tyndall articulates becomes, for Spencer, the continual presence of an unknowable and absolute force.

In the opening pages of *Creative Evolution*, Henri Bergson extends this line of thought. Bergson criticizes Spencer for failing to enter into the logic of the “Unknown,” and thus of excluding a true study of life from the domain of philosophy. Quoting Spencer's declaration that “the Absolute is not in our province; we are brought to stand before the Unknowable” (Bergson, xxi), Bergson argues that “for the human intellect, after too much pride, this is really an excess of

humility” (Bergson, xxi).

If the intellectual form of the living being has been gradually modeled on the reciprocal actions and reactions of certain bodies and their material environment, how should it not reveal to us something of the very essence of which these bodies are made? Action cannot move in the unreal [...]. Intellectual activity, in so far as it relates to a certain aspect of inert matter, ought, on the contrary, to give us a faithful imprint of it, having been stereotyped on this particular object. (Bergson, xxi).

Since the body is situated by the “Unknowable” forces that insist within the material world, Bergson argues that intellectual activity, itself dependent upon the logic of its material support, must carry within it the logic of these forms. Rather than rest mute before the “Unknowable,” the scene of the “Unknowable,” of the perpetual movement of force, becomes itself the logic of the material world. By distinguishing between intellectual and intuitive thought, as modes that respond, respectively, to the “Known” and the “Unknowable,” the task of philosophy involves entering into, and delineating, the logic of the “Unknowable.” Gilles Deleuze, following in this tradition, offers the useful terminology of “primary nature” and “secondary nature” to distinguish between force as it is governed by law, and as it persists in excess of law. While “secondary nature is bound by its own rules and its own laws”(*Coldness and Cruelty* 27), primary nature “overrides all reigns and all laws”; it “needs no foundation and is beyond all foundation”(*Coldness and Cruelty*, 27).

In his reading of Nietzsche, Deleuze’s distinction between these two scenes of nature becomes, once again, the tension between a law governed thermodynamics and the perpetual motion of forces. Deleuze argues that Nietzsche works to expose the logic of nature in perpetual motion, in contradistinction to thermodynamic thought: while “Nietzsche understood physical science, the energetics and thermodynamics of his time [...] it is now clear that he dreamt of a fire machine completely different from the steam engine”(30). Whereas the steam engine is

governed by the laws of thermodynamics, the “Fire Machine,” is an inexhaustible engine ungoverned by, and always in excess of, the laws of thermodynamics. Deleuze’s reading of Nietzsche’s “eternal return of the same,” likewise distinguishes between these two scenes of force. The eternal return of the same, Deleuze writes, “must not be interpreted as the return of something that is, that is “one” or the “same”(48). Rather, it must “be thought of as a synthesis; a synthesis of time and its dimensions, a synthesis of diversity and its reproduction, a synthesis of becoming and the being which is affirmed in becoming, a synthesis of double affirmation”(48). In contrast to this synthesis and reproduction, the “mechanistic” notion of eternal return, in which is the “same” that returns, is “a part of the more general enterprise of denying life, depreciating existence and promising it a death (“heat” or otherwise) where the universe sinks into the undifferentiated. Nietzsche accuses the physical concepts of matter, weight and heat of being, in the final analysis, agents of an equalisation of quantities”(45). It is only by separating energy from balance and equilibrium, that the truth of nature can be revealed.

As Elizabeth Grosz writes, for Bergson, Nietzsche and Deleuze, “life is that which accumulates force, attracts other wills, augments itself”(*Nick of Time*, 133).

It refuses or surpasses, at least temporarily, the first law of thermodynamics (the principle of the conservation of energy), for life is that which always functions in excess of need, survival, stability, and pleasure. It sustains itself as a living being by ensuring that the expenditure of energy that life entails is matched by the accumulation of energy in consumption. Yet life is not balance and equilibrium but accumulation or expenditure to excess, the production of the unnecessary, invention and art as well as brutality and cruelty, for its own sake. Life is the supreme value, above identity, above being, above the human, and above knowledge. (*Nick of Time*, 133)

Primary nature becomes a scene of energies that operate without limit and beyond knowledge, while secondary nature constrains these energies to what can be known through the thermodynamic laws of conservation and decline. Through Spencer's appeal to Mansel's

transcendental realist appropriation of a Kantian vocabulary, the natural world appears as the logic of the “Unknowable.” As Tyndall writes, the “mystery and the miracle of vitality”(465) appears beyond the identity of the single body, beyond the human itself, and beyond knowledge.

III. Thermodynamics and Literary Form

In the “Conclusion” to *The Renaissance* Walter Pater writes, following in the tradition of Helmholtz, Tyndall, and Spencer, that the same forces and elements compose the organic and inorganic world.

What is the whole physical life in that moment but a combination of natural elements to which science gives their names? But those elements, phosphorus and lime and delicate fibres, are present not in the human body alone: we detect them in places most remote from it. Our physical life is a perpetual motion of them—the passage of the blood, the waste and repairing of the lenses of the eye, the modification of the tissues of the brain under every ray of light and sound—processes which science reduces to simpler and more elementary forces. Like the elements of which we are composed, the action of these forces extends beyond us: it rusts iron and ripens corn. (150)

Not only do the same forces move through all bodies, but the truth of the human body is only revealed through the forces that both compose and decompose the human body.

As Pater continues, “that clear, perpetual outline of face and limb is but an image of ours, under which we group them—a design in a web, the actual threads pass beyond it”(*The Renaissance*, 150). The body ceases exist as a coherent object, and its truth appears as a design within a web of energies. The integration of the body into a system of transformative energies takes Pater to a consideration of the logic of the material world. Pater argues that the logic of these forces is not “a chaotic mutation,” but rather that there is “an antiphonal rhythm, or logic, which, proceeding uniformly from movement to movement, as in some intricate musical theme” that links together

the “infinitely diverse impulses”(Plato, 17) that compose the material world.

As in the philosophical tradition that I have outlined above, Pater insists that the “logic” that organizes these natural forces is not a “mechanic law”(Plato, 32) that mutes the specificity of phenomenal experience by reducing the world to a state of “equilibrium”(Plato, 32). Nature is, rather, the perpetual movement of forces within which there is a continual increase of possible phenomena, of forms that arise at the “concurrence, renewed from moment to moment, of forces parting sooner or later on their ways”(Renaissance, 150). For Pater, the challenge of literary style is to account for the experience of this logic as the cause of subjective experience.

D.H. Lawrence, likewise, argues that there exists a natural, immanent logic of the material world, and opposes this logic to the existence of a equation that would relate these forces. In his *Fantasia of the Unconscious*, Lawrence offers the following brief analysis of Einstein's theory of relativity:

As far as I can see, Relativity means, for the common amateur mind, that there is no one single absolute central principle governing the world. The great cosmic forces or mechanical principles can only be known in their relation to one another, and can only exist in their relation to one another. But, says Einstein, this relation between the mechanical forces is constant, and may be expressed by a mathematical formula: which mathematical formula may be used to equate all mechanical forces of the universe [...]. What I doubt is the equation formula. It seems to me, also, that the velocity of light through space is the *deus ex machina* in Einstein's physics. Somebody will put salt on the tail of light as it travels through space, and then its simple velocity will split up into something complex, and the Relativity formula will fall to bits. (190)

Lawrence does not mistrust the notion of a hidden ontology that resides in the movements of forces, but rather the idea that there is a law, articulated in mathematical language, and invented by the intellect, which governs the purely imminent relationships between these forces. The universe is purely relational and in no need of a transcendental term—the “equation formula”—that will organize these forces.

Through a baroque theory of the flow of these immanent forces both within the human body and connecting men and women in ecstatic sexual union, Lawrence argues that one can come to participate in these flows of energy only by surrendering the possibility of understanding the logic of nature. Rather than subject this flow of energy to the laws of the intellect, the ethical subject must give him or herself over to the logic of nature, becoming a node through which the flow of energy passes. In his poem, "The Universe Flows," Lawrence rewrites Walt Whitman's lines that "To me the converging objects of the universe perpetually flow, / All are written to me, and I must get what the writing means" (*Song of Myself*, 403-405).

The universe flows in infinite wild streams, related
in rhythms too big and too small for us to know,
since man is just middling, and his comprehension just middling.
If once, for a second, the universe ceased to flow
of course it would cease to exist.
The thought is unthinkable, anyhow.

Only man tries not to flow,
repeats himself over and over in mechanical monotony of conceit
and hence is a mess. (*Poems*, 479)

Whereas Whitman "must get what the writing means" for Lawrence "man is just middling, and his comprehension just middling." Not only is it unthinkable that the universe would cease to flow, but it is unthinkable that there would be a position from which this flow could be deciphered. The problem that Lawrence sets to solve in his novels and poetry is the question of how to articulate this scene of natural flows of energy, while, at the same time, imposing an epistemological limit that will overcome a fetishization of "merging" and "myself."

For Lawrence, as for Pater, the immanent logic of this flow exists beyond the identity of the individual subject. Both argue that the universe, in Pater's words, is neither a "a chaotic mutation," (*Plato*, 17) nor a system of mathematically governed equivalencies, but rather an immanently ordered and continually transforming system. A constellation of texts by William

James, Henry James, Oscar Wilde, and Gerturde Stein, call into question the idea of an immanent ordering of this system of energies. For William James, the human brain is an unstable system of energy, of diverse impulses and wandering attention, that must be brought into a hierarchical order through the imposition of equilibrium and balance by a “a spiritual force” (*Briefer Course*, 104). While Henry James suggests that a dispassionate locus of consciousness can manage the body, for both Wilde and Stein this attempt to control the excesses of the body, to bring the energies and impulses that move through the body into a calm equilibrium, is both undesirable and impossible. In Wilde’s *The Picture of Dorian Gray*, Dorian’s attempt to dispassionately master the desires that emerge out of an electrical circuit that passes from “cell to cell” of his brain, results in the hideous decomposition of his body. Likewise, in Stein’s “Melanctha,” Stein opposes a heroic mastery of experience to the chaos of impulses that inhabit the body. While for Pater and Lawrence the unity of the body is replaced by the immanent field of relations that compose the material world, for Wilde and Stein the excitements and impulses that traverse the body reveal only a chaos of energies. What is, for both Pater and Lawrence, an ecstatic mode of experience, becomes, for Dorian and Melanctha, a limitless suffering.

Pater and Lawrence suggest that the only sin, the only failure in life, is the imposition of a mathematical order on the scene of immanently organized natural energies. While for Pater, the work of style is to inscribe something of this scene of natural energies into the law governed field of literature, Lawrence dreams that the natural flows of sexual energy, brought into visibility through literature, might reveal a scene of truth excluded from the mechanism of the social world. For both William and Henry James, it is the moralist who is able to bring equilibrium to the instability of the nervous system, while Wilde and Stein suggest that the brain

is an ungovernable chaos of energies and excitements, which cannot be mastered, but which can perhaps be written. For Lacan it will become “simply a moral failing [...] a sin”(*Television*, 23) to understand the human as an energetic system, rather than to work to recover the reality of the fragmented body at work beyond the fantasy of the Other. Thermodynamic discourse—as the language of nature—becomes the scene of morality, and the style of one’s engagement with this scene of force becomes the mark of sin or sainthood.

Walter Pater and the Style of Thermodynamics

A central concern of Walter Pater's aesthetic is the relationship between a qualitative and subjective dimension of experience, and the objective discursive language through which this experience might be transmitted. While Pater at once wants to rigorously distinguish between subjective experience and objective discourse, he equally wants to insist that it is the special province of the artist to inscribe something of his subjective experience within the impersonal field of discourse, both making use of, and transforming, the linguistic conventions and historical materials that the artist has available to him. In distinguishing between the specificity of subjective experience and objective discourse, Pater appeals to contemporary debates over the structure and cosmological implications of thermodynamic thought.

Pater argues that the fact that cosmos is in "perpetual motion" suggests that "the very essence of thought [is] itself also such perpetual motion" (*Plato*, 13-15). The truth of thought, and of experience, is revealed by the logic of this perpetual motion. For Pater, in contrast, an understanding of the universe as proceeding towards a thermodynamic heat-death constitutes a turn away from the specificity of experience. In a universe governed by the second law of thermodynamics and moving towards a state of undifferentiated equilibrium, the specificity of phenomena and experience is muted, as all phenomena are governed by a mathematical formula that ultimately makes them equivalent. The seeming variety and specificity of phenomenal experience is reduced to an equation "which had zero is equal to zero for its result" (*Imaginary Portraits*, 120). Pater appeals to both James Tyndall's and Herbert Spencer's revisions of thermodynamic thought in order to theorize a universe that sustains the reality of subjective experience. Both Tyndall and Spencer argue, in their respective treatments of thermodynamic

theory, that it is a mistake to understand the universe as tending towards an entropic heat-death. For both, the universe is in a state of perpetual motion, regulated only by the principle of conservation of energy, where the forces that compose any object or structure pass into new objects, and new structures, in an infinite process of decomposition and recomposition. Whereas if the universe is tending towards equilibrium, and the truth of phenomena is the mathematical discourse within which they are made equivalent, then there is no truth in the particularity of subjective experience, in a universe in a state of perpetual flux, the only truth is the particularity of experience.

In both his fiction and his literary criticism, Pater understands the tension between the objective world of discourse, governed by equivalences, and the specificity of experience, as a metapsychological terrain. In his *Imaginary Portraits*, “Sebastian von Stork” and “Apollo of Picardy,” Pater describes two kinds of madness—one which tries to extinguish subjective experience by returning the world to a state of equilibrium, the other which is the effect of an over-exposure to the transitory flow of phenomena. Through these portraits, Pater links a problem of style to the negotiation of this metapsychological terrain: Sebastian writes a logical treatise that works to extinguish subjectivity and restore equilibrium, while the Prior Saint-Jean, in “Apollo of Picardy,” is driven mad by the impossibility that he could ever transmit the particularity of his experience. While both Sebastian von Stork and the Prior Saint-Jean fail in their attempts at writing, the labor of style becomes, for Pater, an alternative to both Sebastian von Stork’s, and the Prior Saint-Jean’s, madness. The problem of style, of the search for “that finest and most intimate form of truth, the vraie vérité” (22-23), becomes the search for the word, drawn from objective discourse, that will give form to subjective experience becomes. The difficulty of writing offers a third option, between the extinction of the subject within objective

discourse, and a paralysis before the impossibility of giving form to subjective experience, by finding a quality of experience—the wrestling with language—that occurs at the intersection of the subject and discourse.

I. Pater and the Cosmological Question

In *Plato and Platonism* Walter Pater reads the cosmological implications of nineteenth century thermodynamic theory as the repetition of trends in Greek metaphysics. Pater begins by considering Heraclitus's influence on Plato. While “Plato [...] thought himself a Heraclitean in early life,” this influence “was by way of antagonism or reaction; Plato’s stand against any philosophy of motion becoming, as we say, something of a 'fixed idea' with him” (*Plato*, 13).

Surface, we say; but was there really anything beneath it? That was what to the majority of his hearers, his readers, Heraclitus, with an eye perhaps to practice, seemed to deny. Perpetual motion, alike in things and in men’s thoughts about them,—the sad, self-conscious, philosophy of Heraclitus, like one, knowing beyond his years, in this barely adolescent world which he is so eager to instruct, makes no pretense to be able to restrain that. Was not the very essence of thought itself also such perpetual motion? A baffling transition from the dead past, alive one moment since, to a present, itself deceased in turn ere we can say, Is it here? A keen analyst of the facts of nature and mind, a master presumably of all the knowledge that there was, a vigorous definer of thoughts, he does but refer the superficial movement of all persons and things around him to deeper and still more masterful currents of universal change, stealthily withdrawing the apparently solid earth itself from beneath one’s feet. (*Plato*, 13-15)

This passage resonates with Pater’s famous “Conclusion” to *The Renaissance*, from some twenty-five years earlier, where Pater writes that “birth and gesture and death and the springing of violets from the grave are but a few out of ten thousand resultant combinations” (*Renaissance*, 150) appearing within the transformative systems of energy that form both the human and physical world. As Pater continues, “that clear, perpetual outline of face and limb”—the

seeming unified vital human body—“is but an image of ours, under which we group them—a design in a web, the actual threads pass beyond it”(Renaissance, 150). In both this passage on Heraclitus, and the “Conclusion,” solid bodies are a mere semblance, an imaginary unity projected onto a scene of energies and forces.

While Heraclitus registers this fact of fluid energies, he does not offer a philosophical system, but, rather, a series of “harsh, protesting cries” (14), arguing that a “principle of disintegration, the incoherence of fire or flood [...] are inherent in the primary elements alike of matter and of the soul” (15).

Legei pou Herakleitos, says Socrates in the Cratylus, hoti panta chorei kai ouden menei. [Herikleitos says somewhere that all things give way; nothing remains.] But the principle of lapse, of waste, was, in fact, in one's self. 'No one has ever passed twice over the same stream.' Nay, the passenger himself is without identity. Upon the same stream at the same moment we do, and do not, embark: for we are, and are not. (Plato, 15)

Yet besides this theory of “disintegration,” of “chaos,” itself the product of “undisciplined youth,” there is, for Pater, another side to Heraclitus's thought, “an attempt on his part, after all to reduce that world of chaotic mutation to cosmos, to the unity of a reasonable order, by the search for and the notation, if there be such, of an antiphonal rhythm, or logic, which, proceeding uniformly from movement to movement, as in some intricate musical theme, might link together in one of those contending, infinitely diverse impulses”(Plato, 17). For Pater, in other words, the idea that a natural logic inheres within the structure of the material world is the implicit, if undeveloped, truth of Heraclitus's thought.

It is, however, only with nineteenth century science that the “full scope” (Plato, 17) of Heraclitus's thought could be realized. As Pater writes, “the entire modern theory of 'development,' in all its various phases, proved or unprovable” is “but old Heracliteanism awake once more in a new world, and grown to full proportions”(Plato, 17).

To the 'observation and experiment' of the physical enquirer of to-day, the eye and the sun it lives by reveal themselves, after all, as Heraclitus had declared (scarcely serious, he seemed to those around him) as literally in constant extinction and renewal; the sun only going out more gradually than the human eye; the system meanwhile, of which it is the center, in ceaseless movement nowhither. Our terrestrial planet is in constant increase by meteoric dust, moving to it through endless time out of infinite space.
(*Plato*, 18)

Pater thus distinguishes between an impetuous, immature Heraclitean flux, a lawless chaos of “contending, infinitely diverse impulses” (*Plato*, 17), and a mature theory of the flux, where “change is the irresistible law of our being” (*Plato*, 21). In the mature theory of the flux, revealed by contemporary physics, the Earth drifts through endless time and infinite space; the order and logic of this space and the bodies within it does not come from the stability of objects and forms, nor it is a chaos of impulses, for the laws of thermodynamics regulate the constant cycles of extinction and renewal.

Whereas the modern philosophy of development finds law within motion, Pater argues that Plato, reacting against the lawlessness of a purely destructive theory of the flux, establishes a scene of law by rejecting motion. Plato's denial of the reality of motion comes from the fact that Plato, who himself lived in the “barely adolescent world” of ancient Greece, responded to the lawless chaos of the “immature' theory of the flux. For Plato, the only valid knowledge is that “which corresponds to the ‘Pure Being,’ that after all is only definable as “Pure Nothing,” that colourless, formless, impalpable existence [...] for whom Parmenides became a sort of inspired voice”(Plato, 27). For Plato, “motion becomes the token of unreality in things, of falsity in our thoughts about them” (*Plato*, 19). These two responses to the Heraclitean “protest”—a mature Heraclitean philosophy and Platonic appropriation of a Parmenidean being to deny motion—persist as distinct tendencies in modern scientific thought.

And in the nineteenth century, as on the one hand the philosophy of motion, of the “perpetual flux,” receives its share of verification from that theory of development with which in various forms all modern science is prepossessed; so, on the other hand, the philosophy of rest also, of the perpetual lethargy, the Parmenidean assertion of the exclusive reign of “The One,” receives an unlooked-for testimony from the modern physical philosopher, hinting that the phenomena he deals with—matter, organism, consciousness—begin in a state of indeterminate, abstract indifference, with a single uneasy start in a sort of eternal sleep, a ripple on the dead, level surface. Increasing indeed for a while in radius and depth, under the force of mechanic law, the world of motion and life is however destined, by force of its own friction, to be restored sooner or later to equilibrium; nay, it already gone back some noticeable degrees (how desirably!) to the primeval indifference, as may be understood by those who can recount the time it will take for our worn-out planet, surviving all the fret of the humanity it housed for a while, to be drawn into the sun. (*Plato*, 31-33)

Pater, that is, in negotiating the relationship between Heraclitus and Plato, draws a philosophical distinction between two interpretations of the critique of unified physical bodies that is offered by the nineteenth century science of energy. In both the “Heraclitean” and “Parmenidean” versions of energetics, the stability of forms is only apparent. Within the Heraclitean version, the forces that exist beyond the stability of forms are in a state of continual flux, moving “through endless time” and “infinite space”; in the Parmenidean version, this flux of forces is constrained by the logics of equilibrium and entropy: while movement and increase proceed through “the force of mechanical law” (*Plato*, 33), this movement slowly diminishes under the “force of its own friction” (*Plato*, 33). In distinguishing between these two scenes of energetics, equating entropic decline with a transcendental religious perspective—the desire for a return to the “One”—and perpetual motion with secular “modern theories of development” Pater describes the terrain of a debate, in the second half of the nineteenth century, over the metaphysical implications of thermodynamic theory.

In his 1852 paper, “On a Universal Tendency in Nature to the Dissipation of Mechanical Energy,” William Thompson notes that while heat can be used to produce motion, a certain

amount of energy will always dissipate through friction. Once this heat has dissipated, it cannot serve to produce further motion. As Thomson writes, “the conversion of heat into mechanical effect could be admitted for heat engines operating with a fall from high to low temperatures, while the reconversion or recovery of mechanical effect 'lost' as the heat of conduction or friction in less-than-perfect engines could not”(101). As potential energy is actualized, the amount of potential energy in the universe tends towards a state of exhaustion. The sun will extinguish, motion will cease, and the universe will rest in a state of unperturbed equilibrium. For Thomson, like Pater, the heat death of the universe has clear metaphysical consequences: for Pater the notion that the universe will return to a state of equilibrium is in line with the formless, impalpable Parmenidean “Pure Being”; for Thomson the heat death of the universe becomes the proof of a biblical literalism. As Crosbie Smith writes, for Thomson this thermodynamic proof of Christian cosmology became the basis for a religious ethics.

The directional flow of energy through space offered human beings the opportunity of directing, though not restoring, those mighty gifts of the Creator, the energies of nature. But such an irreversible tendency was not ‘loss’ of energy in the material world. Human beings had a duty to employ engines for the benefit of mankind and in aid of its commercial and moral ‘progress.’ Failure properly to direct and harness those gifts of energy was therefore only a waste, and in that sense a sin of ‘dissipation,’ with respect to human beings rather than in nature. (Smith, 101)

Not only did the heat death of the universe seem to prove that the universe had a beginning and an end, and therefore a creator, but it allowed Thomson to define the field of ethical action in terms of a utilization of the gifts of energy. For both Pater and Thomson, the second law of thermodynamics is a theological orientation that constitutes a turn away from the reality and specificity of phenomenal experience, towards a scene of divine causality.

Whereas for Thomson the science of thermodynamics was evidence of a Christian cosmology and ethics, the transformative logic of thermodynamic thought equally seemed a

powerful tool, along with Darwinian evolution, in the articulation of a secular materialism. As Smith writes, James Tyndall “was quick to perceive the value of conservation of energy in the armoury of scientific naturalism” (183). However, as Smith continues, “in order to appropriate the doctrine for these ends, he needed to break any perceived North British monopoly on physical truth” (182). In order to claim the science of thermodynamics for a secular scientific naturalism, Tyndall appeals, in his 1863 *Heat as a Mode of Motion*, to the work of the German physicist Julius Robert von Mayer in order to articulate a thermodynamics of perpetual motion that severs the transformative logic of the first law of thermodynamics from the theological consequences of the heat death of the universe.

In *Heat as a Mode of Motion* Tyndall argues, against a notion of entropic decline, that conversion of heat into motion is fully reversible, and that useful heat can be produced by friction. As he writes: “All the force of our locomotives is derived from heat, and all of it eventually becomes heat” (8). While for Thomson the fact that the locomotive is, itself, an imperfect heat engine, means that the heat that results from friction is “lost” to humans, Tyndall argues that friction, when examined at a macroscopic level, allows the full retransformation of mechanical energy into useful motive force. “The train is brought to rest—How? Simply by converting the entire moving force which it possessed at the moment the brake was applied, into heat”(9). Tyndall argues that the disperse heat, created through friction, continues to function as a motive force.

To combat a notion of friction as the loss of heat, Tyndall proposes “another theory” that “deserves our serious attention—the Meteoric Theory of the Sun” (445). According to the Meteoric Theory, the energy expended by the sun is restored to the sun by the heat generated through friction when meteors collide with it. As Tyndall writes of the “meteor theory”:

Here we have an agency competent to restore his lost energy to the sun, and to maintain a temperature at his surface which transcends all terrestrial combustion. In the fall of asteroids we find the means of producing the solar light and heat. It may be contended that this showering down of matter necessitates the growth of the sun; it does so; but the quantity necessary to maintain the observed calorific emission for 4,000 years would defeat the scrutiny of our best instruments. If the earth struck the sun, it would utterly vanish from perception; but the heat developed by its shock would cover the expenditure of a century. (447)

First proposed by Mayer in 1848, the “Meteoric Theory” was one of a series of theoretical endeavours to explain the continuing heat of the sun, for if the sun was considered merely as a burning mass of coal—as Tyndall writes, the temperature of the sun “transcends all terrestrial combustion”—then the diminution of heat coming from the sun would be observable over the course of a single lifetime. The meteor theory secularizes the universe by effectively deanthropomorphizing the universe. Not only does the meteor theory turn the universe into a system of perpetual motion, but the possible extinction of humanity, in the chance that the earth would be pulled into the sun, becomes the mechanism through which the universe continues to exist as a system of active energies.

In the “Conclusion” to *The Renaissance*, Pater’s metaphor for experience is a “flame.” As Pater writes, “To burn always with this hard, gem-like flame, to maintain this ecstasy, is success in life” (152). As Billy Inman has noted, Pater seem to draw his metaphor of a “gem-like flame” from Heat as a Mode of Motion. Tyndall writes of an experiment where a heated diamond is placed in a jar of oxygen.

Most of you know the scientific history of the diamond—that Newton, antedating intellectually the discoveries of modern chemistry, pronounced it to be an unctuous or combustible substance. Everybody now knows that this brilliant gem is composed of the same substance as common charcoal, graphite, of plumbago. A diamond is pure carbon, and carbon burns in oxygen. Here is a diamond, held fast in a loop of platinum-wire; heating the gem to redness in this flame, I plunge it into this jar, which contains oxygen gas. See how it brightens on entering the jar of oxygen, and now it

glows, like a little star, with a pure white light. How are we to figure the action s here going on? Exactly as you would present to your minds the idea of meteorites showering down on the sun. The conceptions are, in quality, the same, and to the intellect the one is not more difficult than the other. You are to figure the atoms of oxygen showering against this diamond on all sides. They are urged toward it by what is called chemical affinity; but this force, made clear, presents itself to the mind as pure attraction, of the same mechanical quality, if I may use the term, as gravity. Every oxygen atom as it strikes the surface, and has its motion of translation destroyed by its collision with the carbon, assumes the motion which we call heat; and this heat is so intense, the attractions exerted at these molecular distances are so mighty, that the crystal is kept white-hot, and the compound, formed by the union of its atoms with those of the oxygen, flies away as with carbonic-acid gas. (43)

Tyndall's "scientific history of the diamond," comes early in *Heat as a Mode of Motion*, as a first example of Mayer's "meteor theory." The diamond burns white-hot as the "atoms of oxygen," which Tyndall imagines as attracted by a "pure attraction" akin to gravity, transfer their energy, as heat, through the friction of their collision. In identifying subjective experience as a "gem-like flame" Pater turns the scene of Heraclitean physics, of the perpetual flux of phenomena, into a metaphor for aesthetic experience. Whereas the Parmenidean fantasy of a return to the "One" imagines that "the world of motion and life is however destined, by force of its own friction, to be restored sooner or later to equilibrium...to the primeval indifference"(Plato, 31-33), by taking the gem-like flame of the white-hot diamond, which for Tyndall is proof of the perpetual flux in that friction generates motive force, rather than dissipates is, as a symbol for "success in life," Pater identifies aesthetic experience with the continual transformations of a phenomenal world governed only by the law of conservation of force.

II. A Thermodynamics of Experience

Hermann von Helmholtz's 1861 public lecture, "The Application of the Law of the

Conservation of Force to Organic Nature,” is generally taken as the first text explicitly applying thermodynamic theory to life.

At the beginning of this century, physiologists believed that it was the vital principle which caused the processes of life, and that it detracted from the dignity and nature of life if anybody expressed his belief that the blood was driven through the vessels by the mechanical action of the heart, or that respiration took place according to the common laws of the diffusion of gases. The present generation, on the contrary, is hard at work to find out the real causes of the processes which go on in the living body. They do not suppose that there is any other difference between the chemical and the mechanical actions in the living body and out of it than can be explained by the more complicated circumstances and conditions under which these actions take place, and we have seen that the law of the conservation of force legitimizes this supposition. This law, moreover, shows the way in which this fundamental question, which has excited so many theoretical speculations, can be really and completely solved by experiment. (Helmholtz, 121)

Until it was understood that food was a source of energy, Helmholtz notes, it was assumed that there was some sort of infinite source of force within the animal—food and water served as something like grease on an axle, to keep the parts of the animal lubricated. Once the principle of the conservation of energy—that shows that energy is not created or destroyed, but rather transformed—is established, the body becomes a mechanism for the transformation of energy: whereas a steam engine uses coal as a source of energy, the human uses the heat, or calories, in food.

When, in *Heat as a Mode of Motion*, Tyndall comments on this section of Helmholtz's essay, he begins by noting, following Helmholtz, that the human functions according to thermodynamic principles.

We see, however, that the engine and the animal derive, or may derive, these powers from the self-same source. We can work an engine by the direct combustion of the substance which we employ as food; and, if our stomachs were so constituted as to digest coal, we should, as Helmholtz has remarked, be able to derive our energy from this substance. The grand

point permanent through all these considerations is, that nothing is created.
(463)

Yet whereas for Helmholtz the “vital principle” (Helmholtz, 121) “can be really and completely solved by experiment” (Helmholtz, 121), for Tyndall the experimentally verified fact that the same forces constitute the organic and the inorganic constitutes a mystery.

The matter of our bodies is that of inorganic Nature. There is no substance in the animal tissues which is not primarily derived from the rocks, the water, and the air. Are the forces of organic matter, then, different in kind from those of inorganic? All the philosophy of the present day tends to negative the question; and to show that it is the directing and the compounding, in the organic world, of forces belonging equally to the inorganic, that constitute the mystery and the miracle of vitality. (Tyndall, 465)

The law of conservation of energy—the perpetual transformations of energy and heat—becomes the principle of a pantheistic religion of nature.

In the “Conclusion” to *The Renaissance*, Pater takes, from Tyndall, the notion of the transformations of energy as mysterious and vital. However, whereas for both Tyndall and Helmholtz the chief piece of evidence that the organic and inorganic participate in the same thermodynamic logic, in the same network of forces and elements, is that the human digestive system is a kind of heat engine where chemical combustion transforms food into the form of energy accessible to the human, Pater displaces the moment of heat as cause from “combustion” of fuel in the stomach, to the experience of heat transfer—the experience of plunging into cool water on a hot summer day.

To regard all things and principles as inconstant modes or fashions has more and more become the tendency of modern thought. Let us begin with that which is without—our physical life. Fix upon it in one of its more exquisite intervals, the moment, for instance, of delicious recoil from the flood of water in the summer heat. What is the whole physical life in that moment but a combination of natural elements to which science gives their names? But those elements, phosphorus and lime and delicate fibres, are present not in the human body alone: we detect them in places most remote

from it. Our physical life is a perpetual motion of them—the passage of the blood, the waste and repairing of the lenses of the eye, the modification of the tissues of the brain under every ray of light and sound—processes which science reduces to simpler and more elementary forces. Like the elements of which we are composed, the action of these forces extends beyond us: it rusts iron and ripens corn. (150)

As in Helmholtz's and Tyndall's poetic evocations of the forces that pass through both organic and inorganic bodies, the notion of the human body as unified and solid is replaced by the notion of the human body as a momentary confluence of diverse forces and elements. Yet in Pater's passage, the transformation of heat into motion—in the experience of the “exquisite interval” of a hot body coming into contact with a cold body—does not involve digestion. Rather, this moment of thermodynamic exchange becomes the base unit of experience. In these terms, it is the energy generated from this experience—the energy of the “delicious recoil” where a noun of mechanical reaction is modified by an aesthetic adjective—that Pater then traces through the physical world, as the passage follows the dispersal of this energy through the body—through delicate fibers of phosphorous and lime—as well as into the physical world beyond the body. Aesthetic experience takes the place of the mechanical process in both Helmholtz's and Tyndall's poetic evocations of the networks of thermodynamic forces, becoming itself a motive force, the origin of an energy that, stretching out through the paragraph, conveys sensations through the body, and that, moving beyond the body, can “rust iron, and ripen corn” (*Renaissance*, 150).

The passage, however, does not end with the dissipation of this energy, but rather with the recuperation of this energy by the human life that exists at the intersection of these forces.

Far out on every side of us those elements are broadcast, driven in many currents; and birth and gesture and death and the springing of violets from the grave are but a few out of ten thousand resultant combinations. That clear, perpetual outline of face and limb is but an image of ours, under which we group them—a design in a web, the actual threads pass beyond it. This at least of flame-like our life has, that it is but the concurrence,

renewed from moment to moment, of forces parting sooner or later on their ways. (150)

Lines of force are “broadcast” out from the human body, yet the human body itself appears as the “concurrence” of these natural forces. It is because experience is the intersection of these forces that human life is “flame-like.” In other words, within Pater's thermodynamics of experience, heat is not just cause, not just something that is “spent,” that causes motion and then disperses into the world. The initial thermodynamic exchange—the hot body coming into contact with cold water—does not result in a tepid body, but rather produces a “flame-like” quality of experience, a flame that is generated at “the concurrence [...] of forces parting sooner or later on their ways”(150). A heat exchange functions rhetorically as both cause and effect of the passage, as the various elements and energies that Pater maps, extending from the initial experience of the hot body coming into contact with cool water, are recollected in a “flame like” experience that is generated precisely by the intersection of these forces. As in Tyndall's notion of perpetual motion, where friction generates motive force, the forces liberated by aesthetic experience themselves produce a flame. Aesthetic experience is a perfect heat engine—the flame of experience does not burn out. Like Tyndall's diamond, like the sun in Mayer's “Meteoric Theory,” the expenditure of heat only causes the flame to burn brighter.

The “Conclusion” is often read as consisting of two distinct parts. As Kanarakis Yannis writes, “The first part employs a discourse that invokes the findings of contemporary science so as to discuss the recognition of fluidity in the physical world, where the second part employs the discourses of associationism, modern psychology, and empirical skepticism” (89). Indeed, critics occasionally note that the first two paragraphs are in a state of conflict. Whereas in the first paragraph—where Pater outlines the discourses of physical science—Pater seems to depend upon the existence of the external world as a place where forces governed by laws pass through

seemingly stable phenomena, in the following paragraph Pater evokes a sceptical tradition of empirical philosophy and associationist psychology that would seem to call the existence of the external world into question.

At first sight experience seems to bury us under a flood of external objects, pressing upon us with a sharp and importunate reality, calling us out of ourselves in a thousand forms of action. But when reflection begins to play upon those objects they are dissipated under its influence; the cohesive force seems suspended like some trick of magic; each object is loosed into a group of impressions—colour, odour, texture—in the mind of the observer. And if we continue to dwell in thought on this world, not of objects but of impressions, unstable, flickering, inconsistent, which burn are extinguished with our consciousness of them: the whole scope of observation is dwarfed into the narrow chamber of the individual mind. (151)

Pater continues, first noting that “every one of those impressions is the impression of the individual in his isolation, each mind keeping as a solitary prisoner its own dream of a world” (151), before noting that each mind is, itself, continually formed and reformed by this “passage and dissolution of impressions, images, sensations, that analysis leaves off—that continual vanishing away, that strange, perpetual, weaving and unweaving of ourselves” (152). The subject, the world, are reduced to the disorganized particularity of discrete impression, out of which it seems one could neither construct a subject nor a world.

Jesse Matz reads this passage as evidence of Pater's debt to the problematic status of the impression within British empirical philosophy. The impression, taken as a base unit of experience, introduced a problem into British thought, from Hume on, of how it is that these impressions “clump together.” And yet Pater's notion of the impression is itself erected on a certain thermodynamic logic. Rather than read Pater's turn to the impression as the basic unit of consciousness as a departure from his appeal to the forces and energies that compose both the organic and inorganic world, I want to suggest that Pater's impression, far from existing as a term of ultimate analysis, is figured as the epiphenomenon of a scene of energy transfers. On the one

hand, Pater's notion of the impression as “flickering,” seems to register the transience of the impression in empiricist philosophy, yet on the other, the human is “flame-like” insofar as he is located at the intersection of forces. As Pater writes, “To burn always with this hard, gem-like flame, to maintain this ecstasy, is success in life” (152). To burn with this “gem-like flame” means to “be present always at the focus where the greatest number of vital forces unite in their purest energy” (152). In other words, Pater's famous “flame” of experience exists only with respect to the scene of vital forces, united in purest “energy.”

Whereas for Tyndall, the “mystery and the miracle of vitality” comes at the intersection of forces that rule both the organic and inorganic world, Pater describes the aesthetic as the experience of this scene of perpetual forces. While Pater insists that “the theory or idea or system which requires of us the sacrifice of any part of this experience, in consideration of some interest into which we cannot enter, or some abstract theory we have not identified with ourselves, or of what is only conventional, has no claim on us” (153), I want to continue to suggest that a specific theoretical scene—the perpetual motion of a “Heraclitean” energetics, articulated by Tyndall—is the precondition of the Paternian impression. In other words, Pater finds, in the Heraclitean flux of forces, a system that does not require the sacrifice of experience.

III. The Heat Engine in the Critic's Laboratory

The distinction that Helmholtz draws between the human as caused by a vital force and the human as caused by thermodynamic transformations of energy, registers a shift that is often seen as constitutive of scientific discourse. Alexandre Koyré, the early twentieth-century philosopher of science, describes the scientific revolution as a metaphysical shift in how nature is

conceived. Koyré argues that in scientific discourse nature is no longer understood as operating through internal causes—what the Aristotelians called “qualities”—but rather through external forces that can only be apprehended as mathematically quantifiable relationships. As the historian of science Peter Dear writes, “Aristotelian physics (also called 'natural philosophy') was the qualitative science of the natural world that explained why things happen in terms of the essential natures of bodies” (3). Aristotelians thus argued that the program of modern science was doomed because its mathematical language was unable to describe qualities. As Koyré writes “[t]he Aristotelian was perfectly right” (*Metaphysics and Measurement*, 28).

It is impossible to furnish a mathematical deduction of quality. And well we know that Galileo, like Descartes somewhat later, and for just the same reason, was forced to drop the notion of quality, to declare it subjective, to ban it from the realm of nature. This at the same time implies that he was obliged to drop sense-perception as the source of knowledge and to proclaim that intellectual, and even a priori knowledge, is our sole and only means of apprehending the essence of the real. (28)

While the Aristotelian program assumed “the reality of universals as entities existing above and beyond their individual instances” (Dear, 26), modern science follows a inductive logic, beginning from quantifiable data and working to construct laws that are continually subject to revision.

While Helmholtz follows the shift from quality to quantity, from “vital forces” to the science of energy, and while Tyndall mystifies the totality of energetic forces as a kind of pantheistic vital spirit, for Pater aesthetic experience is the exposure to this vital scene of transformative energies. Whereas, in Koyré’s reading, scientific discourse is forced to “drop sense perception as a source of knowledge,” it is, for Pater, only by figuring sense perception as the primary data of a quasi-scientific critical discourse that a space can be made for what we might call a quantitative science of qualitative experience. Pater thus begins the “Preface” by

situating the critic at the juncture of two competing discourses of nature, such that the critic has one foot in the world of Aristotelian causes, the other in the quantifiable language of scientific verification. As Pater writes, using the Aristotelian language of qualities as internal causes, “The objects with which aesthetic criticism deals—music, poetry, artistic and accomplished forms of human life—are indeed receptacle of so many powers or forces: they possess, like the products of nature, so many virtues or qualities”(xxix). Yet at the same time, Pater's famous revision of Arnold's claim that the function of the critic is “to see the object as in itself it really is” (xxix) functions to establish a quantitative, experiential science of the artwork. In emphasizing the importance of the critic's knowledge of his own “impression” of the art object, as the only means to approach what is at stake in the art object, Pater reimagines the critic as split between the function of a finely tuned laboratory apparatus, that can experience (as in the French for “experiment”—“*faire une experience*”) various subtle aesthetic phenomena, and the disinterested researcher capable of recording this primary data. As in the “Conclusion,” where the impression occurs at the intersection of forces and energies, the critic's impression registers an activity in the artwork.

What is this song or picture, this engaging personality presented in life or in a book, to me? What effect does it really produce on me? Does it give me pleasure? And if so, what sort or degree of pleasure? How is my nature modified by its presence, and under its influence? The answers to these questions are the original facts with which the aesthetic critic has to do; and, as in the study of light, or morals, or number, one must realise such primary data for one's self, or not at all. (xxix)

The data that emerges as a response to these questions—questions that might govern the record keeping of a chemist in a lab, who monitors the changes in an experimental equipment as it is exposed to various stimuli—becomes the primary data.

And the function of the aesthetic critic is to distinguish, to analyse, and separate from its adjuncts, the virtue by which a picture, a landscape, a fair

personality in life or in a book, produces this special impression of beauty or pleasure, to indicate what the source of that impression is, and under what conditions it is experienced. His end is reached when he has disengaged that virtue, and noted it, as a chemist notes some natural element, for himself and others. (xxx)

The language of virtues and qualities comes to signify subjective aesthetic experience, while the language of scientific experimentation comes to signify the social transmission of this aesthetic experience. In splitting the critic, by imagining him as functioning both as an experimental apparatus—capable of experiencing the subtle effects of aesthetic phenomenon—and as a scientist capable of noting the results obtained by this experimental apparatus, Pater at once inscribes his critical project within the scene of scientific discourse, and opens a space, within scientific discourse, for subjective experience.

Pater thus preserves two distinct scenes of energetics, the qualitative, subjective Heraclitean flux and the quantitative Parmenidean equilibrium, as the critical and creative tension that the field of aesthetic phenomena negotiates. While Pater understands aesthetic experience as an exposure to the particularity of phenomena as they are continually transformed by the perpetual motion of the forces that pass through them, he models the structural stability of impersonal discourse on the equilibrium of an entropic model. By understanding the artist and critic as split between these two scenes, at once deriving knowledge from subjective qualitative experience, and transmitting this knowledge through the formal objective discourse, Pater proposes that the aesthetic critic is able to develop a quantitative science of qualitative experience.

In the “Preface,” the “quality” or “virtue” that the aesthetic critic is receptive to is continually compared to a kind of heat. Linguistic and historical material, which Pater speaks of as a limiting and limited structure, is transformed, taken into a state of flux, by the addition of the

“heat” of subjective experience. “Take, for instance, the writings of Wordsworth. The heat of his genius, entering into the substance of his work, has crystallised a part, but only a part of it; and in that great mass of verse there is much which might well be forgotten”(xxx). Whereas in thermodynamic thought heat is the “*vis viva*,” the “heat” of Wordsworth's genius becomes the “virtue, the active principle” (xxx) in his poetry. In the work of “Goethe or Byron” this “virtue” is mixed with common elements, and to read them one must cast off “all *débris*” to reveal “only what the heat of their imagination has wholly fused and transformed”(xxx). It is thus the work of the artist and critic to translate between these two scenes, between the vital scene of perpetual movement, qualitative and subjective experience, and the quantitative scene of structure and transmission. While the “flame of experience” is the effect of a scene of vital forces, the experience of motion can be inscribed within a structure that is itself permanent: the flux of experience can be “crystallised,” and perpetual motion can be represented by rigid structure. It is thus Leonardo Da Vinci's desire, “by a strange variation of the alchemist's dream, to discover the secret, not of an elixir to make man's natural life immortal, but of giving immortality to the subtlest and most delicate effects of painting”(68). The problem of transmission, in other words, requires that a scene of experience—which Pater understands as an exposure to the transformative flow of energies—be inscribed within the stable—which is to say immortal—structure of the artwork.

IV. Two Portraits

In *The Renaissance*, both critic and artist negotiate between a scene of experience—understood as a receptivity to the perpetual movement of forces and energies—and the scene of

scientific transmission. While the successful artist is able to negotiate between these scenes, in two of the *Imaginary Portraits*—"Sebastian von Stork" and "Apollo in Picardy"—Pater understands the failure to negotiate between these scenes as a kind of madness. Each of these portraits describe a different kind of madness: Sebastian works to eliminate a scene of subjectivity, and to return the world to a state of equilibrium, while the Prior Saint-Jean is excluded from human society by his experience of unformalizable nature. In these portraits, in other words, the tension between a Heraclitean and Parmenidean energetics becomes a kind of metapsychology, and the portraits case studies that find the origin of psychological dysfunction in the impasse between two styles of energetics.

Pater begins "Sebastian von Stork," which tells the story of life and death of a sixteenth century Dutch man, by proposing that Holland, where lively industry and art are carved out of the indifference and uniformity of the ocean, is a symbol for the human, split between the color of sensuous experience and the cold indifference of metaphysical abstraction.

So genially attempered, so warm, was life become, in the land of which Pliny had spoken as scarcely dry land at all. And, in truth, the sea which Sebastian so much loved, and with so great a satisfaction and sense of well being in every hint of its nearness, is never far from distant in Holland. Invading all places, stealing under one's feet, insinuating itself everywhere along an endless network of canals [...]. In the very conditions of life in such a country there was a standing force of pathos. The country itself shared the uncertainty of the individual human life; and there was pathos also in the constantly renewed, heavily-taxed labour, necessary to keep the native soil, fought for so unselfishly, there at all, with a warfare that must still be maintained when the other struggle with the Spaniard was over.
(122)

Sebastian, who is born into a wealthy family and exposed to the best of Dutch art and culture, is "so fortunately endowed for the reception of the sensible world" (135). He nevertheless turns away from art and sensuous experience, toward the ocean and metaphysical speculation.

From the midst of the busy and busy-looking house, crowded with the furniture and the pretty little toys of many generations, a long passage led the rare visitor up a winding staircase, and (again at the end of a long passage) he found himself as if shut off from the whole talkative Dutch world, and in the embrace of that wonderful quiet which is also possible in Holland at its height all around him. It was here that Sebastian could yield himself, with the only sort of love he had ever felt, to the supremacy of his difficult thoughts.—A kind of *empty* place! Here, you felt, all had been mentally put to rights by the working-out of a long equation, which had zero is equal to zero for its result. Here one did, and perhaps felt, nothing; one only thought. (120)

Captivated by his “difficult thoughts,” Sebastian devotes his life to a “neat and elaborate manuscript”(129), that begins with his “boyish enthusiasm for a strange, fine saying of Doctor Baruch de Spinoza, concerning the Divine Love—That who so loveth God truly must not expect to be loved by him in return”(130). The indifference of this “Divine Love” demands an “intellectual disinterestedness” in Sebastian, through which he must put the “subjective side out of the way, and let pure reason speak” (130). Sebastian produces a series of theorems and corollaries that constitute his ethical system.

There can be only one substance: (corollary) it is the greatest or errors to think that the non-existent, the world of finite things seen and felt, really is: (theorem): *for, whatever is, is but in that:* (practical corollary): one’s wisdom, therefore, consists in hastening, so far as may be, the action of those forces which tend to the restoration of equilibrium, the calm surface of the absolute, untroubled mind, to *tabula rasa*, by the extinction in one’s self of all that is but correlative to the finite illusion—by the suppression of ourselves. (132)

Sebastian—like Pater—understands subjective experience as precisely that which is excluded from the entropic progress of forces towards a state of equilibrium. Rather than take the side of subjective experience against uniformity and equilibrium, Sebastian, finding himself divided between the fact of his subjective experience and a mathematical logic, comes to see subjective experience as a stain, as an eddy, within a universal tendency towards equilibrium. Seduced by a “Parmenidean” thermodynamics, Sebastian turns away from subjective experience, and works to

restore the “absolute mind” to this state. Whereas for William Thomson “the directional flow of energy through space offered human beings the opportunity of directing, though not restoring, those mighty gifts of the Creator, the energies of nature” (Smith, 101), for Sebastian, the goal of the human is to aid this directional flow of energy, and thus to ensure that the dissipation of energy, and the extinction of the “finite illusion,” happens as quickly as possible.

When a girl, Mademoiselle van Westrheene, falls in love with Sebastian, all her “little arts of love” (128) seem opposed to the “absolute nature we suppose in love” (128). Sebastian responds to her advances by writing her a “cruel letter” in which he accuses her, “so natural, and simply loyal! of a vulgar coarseness of character” (129). This letter is such a shock to Mlle van Westrheene that she wastes away, and soon dies, from “wounded pride” (129). While this “cruel letter” is addressed to Mlle van Westrheene, Sebastian attaches a copy of the letter as the final page of his philosophical manuscript. The letter completes the manuscript, demonstrating, as an ethic, the “practical corollary” of Sebastian’s theory, by putting into motion “the extinction” of that which is “correlative to the finite illusion” and mortifying the flesh to prove that there exists a scene—of the absolute mind—beyond human experience.

Sebastian, his manuscript completed, flees the city to live as a recluse by the ocean.

As he stayed in this place, with one or two silent serving people, a sudden rising of the wind altered, as it might seem, in a few dark, tempestuous hours, the entire world around him. The strong wind changed not again for fourteen days, and its effect was a permanent one; so that people might have fancied that an enemy had indeed cut the dykes somewhere—a pin-hole enough to wreck the ship of Holland, or at least this portion of it, which underwent an inundation of the sea the like of which had not occurred in that province for half a century. Only, when the body of Sebastian was found, apparently not long after death, a child lay asleep, swaddled warmly in his heavy furs, in an upper room of the old tower, to which the tide was almost risen; though the building still stood firmly, and still with the means of life in plenty. And it was in the saving of this child, with a great effort, as certain circumstances seemed to indicate, that Sebastian had lost his life. (137)

In his death, that is, Sebastian turns away from his desire to extinguish subjectivity, sacrificing himself in order to perpetuate the “finite illusion” of subjective existence. Sebastian's life and death thus proceeds as the failed negotiation between a conception of force as constrained by equations and equilibrium, and force tending towards activity and life, between Parmenidean heat death, and the endless phenomena of Heraclitean energetics. Despite the fact that Sebastian redeems himself by taking the side of the particularity of subjective experience, it is his failure to find a balance between these two scenes that leads to his death.

Not only does the tension between these two systems allow Pater to theorize subjective experience as opposed to mathematical equilibrium, but the tension between these two positions becomes a metapsychological terrain that Sebastian must negotiate. The question of whether Sebastian will work to extinguish the “finite illusion,” and thus help the universe return to the undifferentiated equilibrium of Parmenidean “Pure Being,” or whether Sebastian will preserve the particularity of subjective experience—as he does when he ultimately sacrifices himself in order to save the young child, becomes the ethical terrain that Sebastian negotiates.

In that it understands both ethics and style as the negotiation of the tension between a physics of perpetual motion and entropic decline, “Sebastian von Stork” asks to be read against “Apollo in Picardy,” where there is an equivalent failure of mediation between subjective experience and formal scientific discourse. Whereas Sebastian's pathology involves being seduced by an impersonal scene of the equilibrium of forces, the protagonist of “Apollo in Picardy,” Prior Saint-Jean, is driven mad by his exposure to something for which he can find no place in discourse, by his attachment to the irreducible quality of his experience.

“Apollo in Picardy” begins when the Prior Saint-Jean is sent “to the Grange or *Obedience* of Notre-Dame De-Pratis” (188). Upon his arrival, he discovers that he is in the presence of

Apollo, who appears as one of Heine's pagan Gods in exile, in the guise of a "servant of the house, or farm labourer," who has an "unserflike ease," "godly [...] posture," harp and bow. Apollyon begins to have a series of effects on various "structures." As his first task, Prior Saint-Jean sets to supervise the construction of a monastic barn. As they begin building, the

mysterious harper sat there always, at the topmost point achieved; played, idly enough it might seem, on his precious instrument, but kept in fact the hard taxed workmen literally in tune, working for once with a ready will, and, so to speak, with really inventive hands—working expeditiously, in this favourable weather, till far into the night, as they joined unbidden in a chorus, which hushed, or rather turned to music, the noise of their chipping. (193)

The music works a change in the manner of building, "not so much of style as of temper, or management, in the application of acknowledged rules," which strips away ornamentation, and "turns the heavy manner of using stones, light" (193). Apollyon has the same positive effect on Prior Saint-Jean's body that he has on the building. As Pater writes, "is not the human body, too, a building, with architectural laws, a structure, tending by the very forces which primarily held it together to drop asunder in time?" (194). In other words, whereas Sebastian identifies with the temporal limit where structures "drop asunder in time," in "Apollo" the emphasis is on the interrelation between the possibility of structure, and the fact of dissolution. Form and dissolution are not here opposed, for the same forces that are the precondition of structure are the forces of dissolution.

Robert Keefe offers that "Apollo served as the foremost mythical representative of Greek sanity" as a "sort of tutelary deity, imparting to ancient Greece and, potentially, to a harried Victorian England, the virtues necessary for true greatness" (159-160). Thus, for Keefe, Pater's evocation of Venus in *The Renaissance* constitutes an "anti-Apollonian campaign," that works to overcome the limits of Victorian virtue. The Renaissance is followed by Pater's "Study of

Dionysus,” which Keefe characterizes, again, as a “conscious attempt to undercut the Victorian cult of Apollo” (161). Yet the Apollo of “Apollo of Picardy” is not the ascendance of an imaginary unity over the flux of forces that are responsible for “that continual vanishing away, that strange, perpetual, weaving and unweaving of ourselves” (*Renaissance*, 152). The fact that the representative of Apollo in “Apollo of Picardy” is Apollyon—Greek for “the destroyer” and the name, in Revelations 9:11 for “the angel of the bottomless pit”—serves to underscore that Apollo is the god of death and pestilence as well as of music and medicine. While Apollyon brings a life to the laws that structure the world, his presence has an equally destructive effect.

[O]nce, on his annual return from southern or eastern lands, he had been observed on his way along the streets of the great won literally scattering the seeds of disease till his serpent-skin bag was empty. And within seven days the ‘black death’ was there, reaping its thousands. As a wise man declared, he who can best cure disease can also most cunningly engender it. (195)

Rather than a figure of Victorian morality, who would oppose himself to an unlawful field of desire, Apollyon is the violence in form, the death that works within the medicine that keeps death at bay. As Pater explains, “[i]n short, these creatures of rule, these ‘regulars,’ the Prior and his companion, were come in contact for the first time in their lives with the power of untutored natural impulse, of natural inspiration”(195). Between “Sebastian” and “Apollo” the notion of a rule, of a structure, is displaced. “Structure,” as in the thermodynamics of equilibrium and entropy, is no longer the name for the transformations of energy, the structuring and destructuring impulses taken as a whole, but is rather that which appears as the momentary stability of these impulses and forces. The scene of “natural impulse” and “natural inspiration” becomes another version of the continual transformation and flux of force within the thermodynamics of perpetual motion.

Through Apollyon, the Prior comes under the spell of an enjoyment that is a kind of

madness—an experience for which he can find no expression. This enrapture begins as the Prior, a scholar of language, “can but wonder as this strange scholar’s knowledge of a distant past, evidenced in his familiarity (it was as if he might once have spoken them) with the dead language in which their text-books are written” (200). Eventually, it is as if the Prior had

passed unwittingly through some river or rivulet of Lethe, that had carried away from him all his so carefully accumulated intellectual baggage of fact and theory. [...] The hard and abstract laws, or theory of the laws, of music, of the stars, of mechanical structure, in hard and abstract formulae, adding to the abstract austerity of the man, seemed to have deserted him; to be revived in him again however, at the very contact of this extraordinary pupil or fellow-inquirer, though in a very different guise or attitude towards himself, as matters no longer to be reasoned upon and understood, but to be seen rather, to be looked at and heard. Did not he see the angle of the earth’s axis with the ecliptic, the deflections of the stars from their proper orbits with fatal results here below, and the earth—wicked, unscriptural truth!—moving round the sun, and those flashes of the eternal and unorbited light such as bring water, flowers, living things, out of the rocks, the dust? The singing of the planets: he could hear it, and might in time effect its notation. Having seen and heard, he might ere-long speak also, truly and with authority, on such matters. Could one but arrest it for one’s sake, for final transference to others, on the written or printed page—this beam of insight, or of inspiration! (201)

Whereas the Prior speaks a dead language, one governed by rules, he hears in Apollyon’s voice the possibility of a living relationship to a dead language. This relationship of dead language to living speech is then figured as the relationship between knowledge and experience—between the “hard and abstract laws, or theory of the laws” which can be expressed in “formulae,” and the experience through which the Prior can “see the angle of the earth’s axis with the ecliptic [...] moving round the sun.” As in the “Conclusion,” the play of vital forces, within which fixed forms appear as moment of stability, is made equivalent to immediate experience.

In the Portrait, the Prior is driven mad by the tension between the qualitative world of subjective experience, and the formulaic and rule governed, mathematically quantifiable, scene of social transmission. The Prior has an experience, a “beam of insight” but is unable to “arrest

it,” to “effect its notation” for “final transference to others” (201). In other words, Pater seems to here understand the social world—ruled by equations and rules and inhabited by “regulars”—as excluding the Prior's subjective and qualitative experience of a version of the Heraclitean flux, where structures appear as a moment in chaos of impulses. When Apollyon introduces a dimension of qualitative experience that drops out of formulaic knowledge, the Prior becomes paralyzed by the impossibility that he will express himself, that he will ever effect the alchemical transformation of experience into form.

V. Mind and Soul

The distinction between the perpetual Heraclitean flux and the entropic Parmenidean search for equilibrium allows Pater to distinguish between a scene of subjective qualitative experience and a scene of social transmission. In the proceeding *Imaginary Portraits* this distinction becomes the psychological terrain that both Sebastian and the Prior Saint-Jean must negotiate. Both Sebastian and the Prior ultimately fail to make a space within objective discourse for subjective experience: Sebastian moves from devoting himself to a purely objective treatise modeled on a mathematical logic to sacrificing himself to save a child; the Prior is driven mad by his inability to transmit something of his subjective experience. In these terms, Sebastian is killed, and the Prior Saint-Jean is driven mad, by their failures of style, by their failures to find a style that will negotiate between these two scenes.

David Delaura has shown that Pater's essay “Style” is a point by point reworking of Cardinal Newman's chapter on literature from *Idea of a University*. Newman begins the chapter by distinguishing between literature, the Bible, and science, and proceeds to argue that the Bible

should be thought of as a scientific work, rather than as a work of literature.

I have said that Literature is one thing, and that Science is another; that Literature has to do with ideas, and Science with realities; that Literature is of a personal character, that Science treats of what is universal and eternal. In proportion, then, as Scripture excludes the personal colouring of its writers, and rises into the region of pure and mere inspiration, when it ceases in any sense to be the writing of man, of St. Paul or St. John, of Moses or Isaiah, then it comes to belong to Science, not Literature. Then it conveys the things of heaven, unseen verities, divine manifestations, and them alone—not the ideas, the feelings, the aspirations, of its human instruments, who, for all that they were inspired and infallible, did not cease to be men. (252)

While, because of its subjective content, literature is untranslatable, the Bible, speaking, through scientific objectivity of “unseen verities,” is fully transparent and fully translatable. Newman continues that

the words, then, in which they are set forth are not language, speech, literature, but rather, as I have said, symbols. And, as a proof of it, you will recollect that it is possible, nay usual, to set forth the propositions of Euclid in algebraical notation, which, as all would admit, has nothing to do with literature. What is true of mathematics is true also of every study, so far forth as it is scientific; it makes use of words as the mere vehicle of things, and is thereby withdrawn from the province of literature. Thus metaphysics, ethics, law, political economy, chemistry, theology, cease to be literature in the same degree as they are capable of a severe scientific treatment. (239)

Within an objective, scientific text, the relationship of language to truth is mediated by the impersonal mathematical signifier. Language, like the algebraic sign, is a symbol for truth. Style, for its own sake, is “a trick and a trade [...] on a par with the gold plate and the flowers and the music of a banquet, which do not make the viands better, but the entertainment more pleasurable; as if language were the hired servant, the mere mistress of the reason, and not the lawful wife in her own house” (243). The style through which truth expresses itself in language is “an extra.” “It is a mere artifice, and that hence it cannot be translated; now we come to their fact, viz., that Scripture has no such artificial style, and that Scripture can easily be

translated”(251). The truth of language thus depends upon the existence of an ideal metalanguage—modeled upon mathematics. While “thought and speech are inseparable” and “style is a thinking out into language,” words are a “mere vehicle for things” (Newman, 239).

While Pater maintains, from Newman, a notion of language as symbol, the “thing” that is symbolized is not the same. For Pater it is precisely the “personal colouring” of experience—that which algebraic notation excludes for both Cardinal Newman and for Sebastian von Stork—that language symbolizes. Whereas for Newman, Scripture can be “easily” translated because it refers to an objective, “universal” and “eternal” truth, for Pater, the problem of style is the difficulty of “translation from inward to outward” (22). The writer is not merely transcribing thought into language, but must work to find an “adaptation, between a relative, somewhere in the world of thought, and correlative, somewhere in the world of language” (19). As Pater writes, “The one word for the one thing, the one thought, amid the multitude of words, terms, that might just do: the problem of style was there!—the unique word, phrase, sentence, paragraph, essay, or song, absolutely proper to the single mental presentation of vision within” (19). He continues, “In the highest as in the lowliest literature, then, the one indispensable beauty is, after all, truth:—truth to bare fact in the latter, as to some personal sense of fact, diverted somewhat from men’s ordinary sense of it, in the former: truth there as accuracy, truth here as expression, that finest and most intimate form of truth, the *vraie vérité*” (22-23). For Pater, “any writer worth translating at all has winnowed and searched through his vocabulary, is conscious of the words he would select” (8). A writer is worth translating only because he has already labored with the translation of personal experience into language.

Yet it is not merely the case that Pater reverses the conditions of truth that Newman puts forward, by suggesting that literature, because it negotiates the relationship of personality and

style, has a claim to universality. Pater does not merely elevate “personality” over objective discourse. Pater’s theory of style is not a turn away from science, but rather the internalization of the vocabulary and subject matter of scientific discourse. “The coming task of English literary style,” he writes, “may well lie in the naturalisation of the vocabulary of science” and in “a liberal naturalisation of the ideas of science too, for after all the chief stimulus of good style is to possess a full, rich complex matter to grapple with” (9). He then introduces the terms “mind” and “soul,” as the key theoretical distinction. Whereas “mind” is the correlate of an objective discourse governed by equilibrium—by the equivalence of the mathematical style—soul is the correlate of subjective experience. In these terms, Sebastian von Stork’s treatise is an attempt to extinguish subjectivity in favour of the objective mind, while the Prior Saint-Jean suffers from an inability to negotiate the problem of soul. As Pater writes, this distinction finds its origin in H.L. Mansel.

An acute philosophical writer, the late Dean Mansel [...] wrote a book, of fascinating precision in a very obscure subject, to show that all the technical laws of logic are but the means of securing, in each and all of its apprehensions, the strict identity with itself, of the apprehending mind. All the laws of good writing aim at a similar unity or identity of the mind in all the processes by which the word is associated to its import. The term is right, and has its essential unity beauty, when it becomes, in a manner, what it signifies, as with the names of simple sensations. To give the phrase, the sentence, the structural member, the entire composition, song, or essay, a similar unity with its subject and with itself:—style is in the right way when it tends towards that. (13)

Mind, as Pater writes, is the architectural element of a literary work, the mark of its formal unity and “logical coherence” (14). Where mind is in indication of conscious design, and “one of the greatest pleasures of really good prose literature is in the critical tracing out of that conscious artistic structure, and the pervading sense of it as we read” (24-25), soul moves beyond conscious design.

As a quality of style, at all events, soul is a fact, in certain writers—the way they have of absorbing language, of attracting it into the peculiar spirit they are of, with a subtlety which makes the actual result seem like some inexplicable inspiration. By mind, the literary artist reaches us, through static and objective indications of design in his work, legible to all. By soul, he reaches us, somewhat capriciously perhaps, one and not another, through vagrant sympathy and a kind of immediate contact. Mind we cannot choose but approve where we recognize it; soul may repel us, not because we misunderstand it. (25)

Mind, that is, is the shared structure of human thought, objective and impersonal, while “soul” is a mark of difference that has to do with the “personality” of the artist. As in *The Renaissance*, where Pater distinguishes between form and the “heat” of genius, “soul” is a force and a fire.

The way in which theological interests sometimes avail themselves of language is perhaps the best illustration of the force I mean to indicate generally in literature, by the word *soul*. Ardent religious persuasion may exist, may make its way, without finding any equivalent heat in language; or, again, it may enkindle words to various degrees, and when it really takes hold of them doubles its force. [...] ‘The altar-fire,’ people say, ‘has touched those lips.’ (16)

“Soul” is beyond “mind”—a quality that can only be symbolized within transmissible discourse. As Pater writes, “soul” “does but suggest what can never be uttered, not as being different from, or more obscure than, what actually gets said, but as containing that plenary substance of which there is only one phase or facet in what is there expressed”(17).

Not only does the opposition between “mind” and “soul” map onto the opposition that Pater draws between a Parmenidean physics and a Heraclitean physics, between Thomson’s entropic theology and Tyndall’s vitalistic perpetual motion, but the problem of “mind,” as articulated by Mansel, is intimately related to nineteenth century discussions of energetics, and to the division between an energetics of equilibrium and an energetics of perpetual motion. Rigorously following Mansel’s quasi-Kantian distinction between reality as it is “conditioned” by the a priori laws of mind, and the “unconditioned” reality that exists outside of these laws,

Herbert Spencer, in his *First Principles*, distinguishes between the “Known”—a scene of force ruled by the laws of thermodynamics—and the “Unknowable”—the scene of an “Absolute” and “Unlimited” force. It will be through Mansel’s distinction between the “conditioned” and the “unconditioned,” which allows Spencer to articulate the “Known” as a symbol of the “Unknown”, that Pater understands “soul” as the symbol of the “plenary substance” of subjective experience.

As I have argued above, Mansel’s quasi-Kantian distinction between reality as it is conditioned by the laws of thought, and the Unknowable Absolute that lies beyond these laws, structures Spencer’s philosophy of thermodynamics. While it may be true according to the laws of thermodynamics that the universe is proceeding towards a heat death, the scene of the Absolute suggests that, beyond these laws, there is a scene of perpetual force. As Spencer writes, our knowledge of force—as ruled by the laws of thermodynamics and tending towards heat-death—is merely a symbol of “the persistence of some Cause which transcends our knowledge and conception [...] without beginning or end”(154-5). As Spencer continues, “it is not inferable from the general progress towards equilibrium that a state of universal quiescence or death will be reached; but that if a process of reasoning ends in that conclusion, a further process of reasoning points to renewals of activity and life” (431). The Unknowable becomes the scene of an infinite and absolute energy, an energy ruled by neither a law of equilibrium nor entropy.

Pater’s appeal to Mansel’s structure of “mind”—to which Pater opposes “soul” as that “plenary substance of which there is only one phase or facet in what is there expressed” (17)—is analogous to Spencer’s distinction between the “Known” and the “Unconditioned Cause” (133) of an Unknowable “Absolute.” Just as the Prior Saint-Jean is torn between a formulaic

knowledge of reality and the direct experience of an unconditioned world, the problem of style is the negotiation of the Known and the Unknowable. While Flaubert is Pater's "martyr to style," passing beyond "mind" to the elusive quality of "soul," it is through Prosper Mérimée—who Pater understands, in Mansel's terms, as a dogmatic Kantian—that Pater offers an analysis of a literature of "mind." Mérimée, Pater writes, "this creature of disillusion who had no care for half-lights, and, like his creations, had no atmosphere about him, gifted as he was with pure mind, with the quality which secures flawless literary structure, had, on the other hand, nothing of what we call soul in literature" (37).

Pater begins his essay on Mérimée with a brief narrative of the historical conditions of Mérimée's life.

Napoleon, sealing the tomb of the Revolution, had foreclosed many a problem, extinguished many a hope, in the sphere of practice. And the mental parallel was drawn by Heine. In the mental world too a great outlook had lately been cut off. After Kant's criticism of the mind, its pretensions to pass beyond the limits of individual experience seemed as dead as those of old French royalty. [...] A time of disillusion followed. (11)

Since Pater, following Mansel's and Spencer's thought, understands that "individual experience" is caused by the forces at play in unconditioned reality, it makes sense that he, again following Mansel, understands Kant as imposing dogmatic limitations on the human. Since language, knowledge, and etc, deals only with "conditioned thought," and since experience is "unconditioned," in this Kantian world of disillusionment, each mind is cut off from the next.

For Pater, the defining psychological event for Mérimée comes from a story that Hippolyte Taine describes in his introductory essay to Mérimée's *Lettres à une Inconnue*. Pater writes that, in Mérimée

a passive ennui [...] became a satiric, aggressive, almost angry conviction of the littleness of the world around; it was as if man's fatal limitations

constituted a kind of stupidity in him, what the French call *bêtise*. Gossiping friends, indeed, linked what was constitutional in him and in the age with an incident of his earliest years. Corrected for some childish fault, in passionate distress, he overhears a half-pitying laugh at his expense, and has determined, in a moment, never to again give credit—to be forever on his guard, especially against his own instinctive movements. (13-14)

To protect himself from this exposure, he must be, as Taine writes, be “*en garde* against an expansion of feeling, against passion, and enthusiasm, to never deliver himself entirely, but to reserve a part of himself as a spectator” (iii).⁴ Rather than working against “man’s fatal limitations,” Mérimée takes advantage of Kant’s “criticism of the mind” in order to shelter his “instinctive movements” from the world of convention and discourse. In other words, Mérimée works to preserve systems of thought, so sacrifice a dimension of experience to this system. What Pater calls Mérimée’s “impersonal” style allows him to retreat from the risk of exposed subjectivity to ensure his place within the social world.

In *Colomba*, which Pater takes as Mérimée’s exemplary work, a Corsican man, Orso, returns to Corsica after having served in the French army. In his absence, his father has been killed by a rival. Colomba, Orso’s sister, has been waiting for Orso’s return, so that he can avenge his father’s murderer, and save the honor of the family. Yet, after so many years in France, he no longer feels bonded to the Corsican codes of honor. Moreover, he has begun to fall in love with an English traveler, who would consider his cold-blooded revenge to be murder. He thus has to find a solution that will allow him to navigate these two sets of social codes. His inaction resolves itself when his Corsican enemies, who assume (mistakenly) that he is on route to find and kill them, try to ambush him. They shoot first, wounding him, but he manages to kill them both. According to Corsican code of the blood feud, he has avenged his father’s murder.

⁴ The several translations in the text are my own. Whenever there is a translation in the text, I cite the original in a footnote. “Être en garde contre l’expansion, l’entraînement et l’enthousiasme, ne jamais se livrer tout entier, réserver toujours une part de soi-même comme spectateur.”

Yet, according to the ideals of French and English law, he is not guilty of murder, but of self-defense. Orso suffers because he is uncertain of his relationship to these various social codes, because he exists in excess these laws. This suffering—a suffering not unlike Prior Saint-Jean’s inability to speak the truth of his experience—is, however, not resolved through a grappling with the material of language, but through the affirmation of a life of convention. As Pater writes, “Colomba, that strange, fanatic being, who has a code of action, of self-respect, a conscience, all to herself [...] is, in truth, the type of a sort of humanity Mérimée found it pleasant to dream of”(28). Mérimée dreams of a world in which laws of convention can be negotiated, in which there is no chance of being duped, of falling victim to a desire, to a scene of experience, that has been excluded from the social scene. Pater continues that Mérimée’s style is “strictly conformable—impersonal in its beauty, the perfection of nobody’s style” (37). The stability of social codes, the stability of what Pater calls, in *The Renaissance* “mere comely form,” allows Mérimée to preserve and protect an element of himself, outside of the domain of this strictly impersonal style. In Mansel’s language, and in terms of Pater’s critique of Mérimée’s Kantian disillusionment, Mérimée experiences the world only as it is conditioned by the laws of thought. He closes himself off, in the novel, from a grappling with the unconditioned quality of subjective experience.

If Mérimée’s prose is impersonal, his letters have an excess of “personality.” These letters “reveal that reserved, sensitive, self-centered nature, a little pusillanimously in the power, at the disposition of another” (34). Pater continues that

just there lies the interest, the psychological interest, of those letters. An amateur of power, of the spectacle of power and force, followed minutely but without sensibility on his part, with a kind of cynic pride rather for the mainspring of his method, both of thought and expression, you find him here taken by surprise at last, and somewhat humbled, by an unexpected force of affection in himself. His correspondent, unknown but for these

letters except just by name, figures in them as, in truth, a being only too much like himself, seen from one side; reflects his taciturnity, his touchiness, his incredulity except for self-torment. Agitated, dissatisfied, he is wrestling in her with himself, his own difficult qualities. He demands both from her a freedom, a frankness, he would have been the last to grant. It is by first thoughts, of course, that what is forcible and effective in human nature, the force, therefore, of carnal love, discovers itself; and for her first thoughts Mérimée is always pleading, but always complaining that he gets only her second thoughts; the thoughts, that is, of a reserved, self-limiting nature, well under the yoke of convention, like his own. (34)

Mérimée's egotism, protected by the impersonal style of his prose, is exposed in these letters.

As a "reserved, self-limiting nature, well under the yoke of convention" (34), who has worked to protect himself from discourse, he is, here, exposed. In his letters he is overcome by "an unexpected force of affection in himself." The "instinctive movements" which Pater argues that Mérimée works to repress, take over in the letters, as he is subjected to the element of experience excludes from his impersonal style. A need for love seduces from his position as spectator, protected from the vagaries of experience, that he assumes in his prose. Mérimée is never forced to wrestle with the inexpressible, with the "thing too many" which is subjective experience, about which, in his impersonal prose, he wants to know nothing.

Mérimée's failure, in other words, is that he does not manage to mediate between a scene of convention and form, and a scene of experience. The excess of "personality" in Mérimée's letters is the effect of his success in producing a flawless literary style. In other words, Mérimée's perfection of "mind" is his failure to fully commit to style. The rigor of "mind" serves to exclude an element of his experience, and thus allows him to withhold something from his literary production, to protect himself against the difficult task of inscribing something of his subjective experience, the unknown cause within him, into his art.

Pater ends his essay on Mérimée with a gesture towards his reading of Flaubert in "Style."

“It has always been my rule to put nothing of myself into my works,” says another great master of French prose, Gustave Flaubert; but, luckily as we may think, he often failed in thus effacing himself, as he was too was aware. “It has always been my rule to put nothing of myself into my works” (to be *disinterested* in his literary creations, so to speak), “yet I have put much of myself into them”: and where he failed Mérimée succeeded. (36)

It is through the conditions of Mérimée’s success in developing an impersonal style that the terms of Flaubert’s happy failure become clear. As it is in Mérimée’s letters that Pater reads an excess of personality that Mérimée does not work to inscribe in objective discourse, Pater reads Flaubert’s love letters as exemplary of this struggle with the material of language. Whereas Mérimée letters are “personal,” Flaubert’s letters are “impersonal”; in them he does not demand to be loved, but, rather, writes of his “love of form,” of a desire for “a book without external attachment, that would support itself through the internal force of its style” (156).⁵ As Pater writes in his review “Correspondance de Gustave Flaubert,” “in contrast with the majority of writers” who are “apt to make a false pretense of facility, it is of the labor that Flaubert boasts” (78). As Pater writes, loosely quoting from Flaubert, “We might be all of us, since Sophocles—well, “tattooed savages!” but still, there was “something else in art beside rectitude of line and the well-polished surface” (81). Pater continues that “we have too many things, too few words. ’Tis from that comes the torture of the fine literary conscience. [...] The difficulty lay in the limitations of language, which it would be the literary artist’s true contention to enlarge”(81). Yet if this labor occurs at the limitations of language, these limitations are not overcome, but “enlarged.” Something new is inscribed within a limited system, which is to say that while the labor of writing does not aim at the limitless impersonal language of Sebastian von Stork’s manuscript, it equally works to overcome the fantasy of a limitless subject, inexpressible, on the

⁵ Flaubert writes of “...un livre sans attache extérieure, qui se tiendrait de lui-même par la force interne de son style.”

other side of a limited language.

If Mérimée's love letters reveal the degree that Mérimée withholds himself from discourse, Pater's reads the "curious set of letters" (27) that Flaubert writes to "Madame X"— Louise Colet—while he composes *Madame Bovary*, as a mark of Flaubert's commitment to discourse. These are love letters, yet Flaubert writes not of his desire for Colet, but of the labor of artistic production. As Pater writes,

In his love-letters it is the pains and pleasures of art he insists on, its solaces: he communicates secrets, reproves, encourages, with a view to that. Whether the lady was dissatisfied with such divided or indirect service, the reader is not enabled to see; but sees that, on Flaubert's part at least, a living person could be no rival of what was, from first to last, his leading passion, a somewhat solitary and exclusive one. (17-18)

In his letters to Colet, Flaubert describes himself as existing within a field of language. "I am a man-quill (*un homme-plume*). I feel through it, because of it, with respect to it, and much more with it" (161-2).⁶ As an "*homme-plume*," language is both medium and dwelling. As Flaubert writes, "ink is my natural element" (248).⁷ Within this field of language Flaubert is tortured by the difficulty of writing, by the labor of choosing the correct words. This work of writing is humiliating and mortifying: "To discover with every sentence words to change, consonances to take out, etc! is an arid labor, fundamentally long and very humiliating. It's in doing this that those good little interior mortifications happen to you" (191-2).⁸ In the search for the right word, Flaubert writes that, "I obey a higher fate" (172).⁹ The exigencies of style, the demand for

⁶ Je suis un homme-plume. Je sens par elle, à cause d'elle, par rapport à elle et beaucoup plus avec elle.

⁷ L'encre est mon élément naturel

⁸ Découvrir à toutes les phrases de mots à changer, des consonances à enlever, etc.! est un travail aride, long et très humiliant au fond. C'est là que les bonnes petites mortifications intérieures vous arrivent

⁹ j'obéis à une fatalité supérieure

perfection, arrive from without, from the impersonal, inhuman field of language within which he is inscribed.

The demands of the field of language paralyze Flaubert. As Jan Goldstein writes, Flaubert, himself, identified his own difficulties as a form of hysteria. As the hysteric cannot speak, Flaubert cannot find the right words and is tortured by the impossibility of expressing that which language demands. Paralyzed within the field of language, Flaubert theorizes the desire that sustains his endeavor. As he writes, to Colet,

It is to you that my thoughts return when I am lost in my musings; I lay there like a tired traveler on the prairie grass that boards my route. When I wake up, I think of you and, throughout the day, your image appears from time to time between the sentences I seek. O my poor sad love, stay with me! I am so empty! (207) ¹⁰

Colet's image draws him forward through his labor. As Flaubert writes, "our love is a kind of bookmark that I place in advance between the pages, and I dream of arriving there in many various ways" (210).¹¹ Colet becomes both the possibility of arriving at an end, and sustenance for the labor of writing, a figure of formal completion against which the labor of writing unfolds. Colet's image becomes coincident with a "love of form," without which he "might have been a great mystic" (217).¹²

The mysticism of Flaubert's "hysteria" becomes an analogue to Prior Saint-Jean's paralysis. Prior Saint-Jean, tormented by the possibility of arriving at an expression of his

¹⁰ C'est sur toi que ma pensée revient quand j'ai fait le cercle de mes songeries; je m'étends dessus comme un voyageur fatigué sur l'herbe de la prairie que borde sa route. Quand je m'éveille, je pense à toi et ton image, dans le jour, apparaît de temps à autre entre les phrases que je cherche. O mon pauvre amour triste, reste-moi! Je suis si vide!

¹¹ Notre amour, par là, est une espèce de signet que je place d'avance entre les pages, et je rêve d'y être arrivé de toutes façons.

¹² Sans l'amour de la forme, j'eusse été peut-être un grand mystique.

experience, is unable to overcome the temptation of mysticism. Unable to overcome his attachment to the possibility of a language in which his experience would be named, he is driven mad by an ideal of form. Flaubert's "love of form," an engagement with the limitations of language, transforms this ideal into a practice, as, in taking up a pen, he gives up a mystical ideal, and turns to the labor of writing.

It is worth noting a subtle, but important difference between Pater's reading of Flaubert, and Derrida's reading of Flaubert in *Force and Signification*.

"Not enough forms..." said Flaubert. How is he to be understood? Does he wish to celebrate the other of form? The "too many things" which exceed and resist form? In praise of Dionysus? One is certain that this is not so. Flaubert, on the contrary, is sighing, "Alas! not enough forms." A religion of the work as form. (29)

Whereas the notion of "force" that Derrida locates is generated by the texture of differences within language itself, the problem of "not enough forms" in Pater's historical context, returns us to the problem of energetics. The tension, for Pater, is not quite an opposition between form and that which resists and exceeds form, a figure of Dionysian excess. It is rather, for Pater, the distinction between two scenes of force, one governed by the mathematical signifier, by logic and coherence, the other an experience of nature that is not mediated by the signifier, and where a perpetual motion of forces, uniting in zones of intensity, produce, in their friction, a flame of experience.

Pater's solution, which he hints at in the odd logic of his description of Leonardo Da Vinci's "strange variation of the alchemist's dream, to discover the secret, not of an elixir to make man's natural life immortal, but of giving immortality to the subtlest and most delicate effects of painting" (68), is that the process of artistic production is, itself, the exposure to this scene of forces, a commitment to "untutored experience." If Pater understands the "fatal limitation" of

man as fact of a division between the communicative language of the social scene, and a mode of qualitative intransmissible experience, that it is only by emigrating, as it were, to the world of letters that this problem can be resolved. For it is only when experience becomes an experience in language—when language becomes the scene of “vital forces unite in their purest energy” (152)—that a trace of this experience might be inscribed in language. If Mérimée, as a master of “mind” holds something in reserve in his articulation of a flawless structure, then Flaubert, who is a “martyr to style” commits to a confrontation with the impossibility of integral transmission. “Soul may repel us”(Style, 25) not just because one might be repelled by the specific “plenary substance” that soul symbolizes, but because, in the quality of “soul” one encounters the problem of subjective experience, and the difficulty of translation. Whereas a literature of mind makes this impasse disappear, a literature of soul frames this impasse, foregrounding the experience of a struggle with language. The fact of the authors struggle with the task of translating experience becomes a motive force—a heat—within the literary object, a heat that has effects within the reader’s body, throwing the reader into contact with the problem of his or her own subjective experience.

The scene of thermodynamics, in which Pater finds a tension between a Heraclitean flux and the Parmenidean “One,” between the infinite and unknowable movement of forces and phenomena and the entropic return to a state of mathematical equilibrium, allows Pater to theorize the problem of aesthetic experience. The science of energy is, for Pater, not only an investigation of the logic of the material world, but the scene of the experience and of ethics, the metapsychological terrain that the author and aesthetic critic must negotiate.

The Moralists' Brain: James, Wilde, and Stein

For Pater, the structure of energetics, and the tension between a thermodynamics of perpetual motion and a thermodynamics governed by principles of equilibrium and entropy, is primarily an affair of metaphysics. While the potential of literary style is that one could make a space for subjective experience within objective discourse, the Paternian subject is continually tempted to enforce the division between experience and discourse. Whereas Sebastian von Stork, like Prosper Mérimée, works to produce a literary world in which there is no room for subjectivity, the Prior Saint-Jean finds himself in a mystical isolation, unable to communicate his experience. While the failure to negotiate this divide results in madness and death, this unhappy ending is brought about by a theoretical position, by a philosophical inflexibility that cuts off the subject from discourse.

In turning to readings of William and Henry James, Oscar Wilde, and Gertrude Stein, I argue that this same formal division, between subjective excess and discursive control, comes to inhabit the material body. In these texts, the problem of energetics, which is for Pater a description of two metaphysical positions, gears into the body, as the nervous system is either considered as a disorganized chaos of impulses, or as a well ordered system in a state of equilibrium. William James understands the nervous system as undergoing constant shifts of energetic equilibrium, as it produces new ideas, desires, and ambitions. While the nervous system begins in a state of relative chaos, the moral subject is able to bring this chaos into control, and to impose order on the disorder of the brain. The “sensualist,” in contrast, is at the mercy of his nervous system.

Both Oscar Wilde's *The Picture of Dorian Gray*, and Gertrude Stein's "Melanctha" respond to this understanding of the brain as a system of energies and energies. In his *The Tragic Muse*, Henry James offers an ethics of a disinterested aestheticist mastery of experience, which largely agrees with William James's notion of the disinterested moral subject. In parodying certain aspects of *The Tragic Muse*, Wilde offers a response to William James's notion of mastery. While James argues that the moralist is able to bring his habits and impulses under his control, in Dorian Gray's failure to master his desires, Wilde suggests that it is impossible to identify a locus of consciousness outside of experience—which is a central element of William James's ethics. The tragedy of Dorian's transformed visage becomes a kind of *reductio ad absurdum* argument against James's position: whereas James assumes that the moralist can preserve a position of consciousness outside of experience, Dorian ascribes to this position, and gives himself entirely to a search for new sensations. Yet rather than remain unaffected by his experiences, Dorian is horribly transformed.

Stein's "Melanctha" does not merely critique James's position, but rather reverses James's valorizations of the moralist and the sensualist. Stein argues that the moralist, who works to impose equilibrium on the energetic excess of the brain, falsifies the truth of the desiring body. By elevating the disorganized and excessive body into an aesthetic object, "Melanctha" fully inverts the terms of James's psychology.

I. William James and the Psychology of Energy

The great innovation of William James's psychology comes in his position that there is no distinction between the impression, as a discrete base unit of experience, and habit. James

argues that the a central problem that empiricist thought has faced is that of how to build general concepts up out of the particular units of experience.

[O]rdinary empiricism [...] has always shown a tendency to do away with the connections of things, and to insist most on the disjunctions. Berkeley's nominalism, Hume's statement that whatever things we distinguish are as 'loose and separate' as if they had 'no manner of connection,' James Mill's denial that similars have anything 'really' in common, the resolution of the causal tie into habitual sequence, John Mill's account of both physical things and selves as composed of discontinuous possibilities, and the general pulverization of all experience by association and the mind-dust theory, are examples of what I mean. (*Essays in Radical Empiricism*, 43)

The skeptical threat that inheres in empiricism, in the "bewildering accidents of so much finite experience" (*Pragmatism*, 292) has, James proposes, driven thought to the comfort of a dogmatic rationalism that proposes "a universe where we can just give up, fall on our father's neck, and be absorbed into the absolute life as a drop of water melts into the river or the sea" (*Pragmatism*, 292). I have argued that Pater understands the impression as an epiphenomenon of a scene of unknown natural forces. James takes aim at this tradition, coming from Mansel and Spenser, writing that "celebrating the mystery of the Unknowable and the 'awe' which we should feel at having such a principle to take final charge of our perplexities" is "but spiritual chloroform" (*Principles*, 179). In other words, for James, empirical thought is at an impasse. Either the impression is elevated as a discrete unit of experience, and it becomes impossible to imagine how one can build a world of experience, or experience is, itself, referred to the scene of the "Unknowable."

James offers his "radical empiricism" as a solution to this impasse by declaring that "*any kind of relation experienced must be accounted as 'real' as anything else in the system*" (*Essays in Radical Empiricism*, 42). Whereas empiricism has tended to find an opposition between habit and the impression, taken as a base unit of experience, James takes habit as internal to the

impression. Impressions, as the base unit of empiricism, are no longer conceived as separate, disjunct, quanta of experience, but, rather, as habitually experienced relationships.

Yet James's 'radical' solution introduces a second problem. If skepticism can be avoided by making habit the base unit of experience, then it seems that all human activity, based on habit, would be reduced to the automatic repetition of habitual associations. However, James argues that, rather than confine us to repetition and reduce us to automatons, it is through habit that voluntary action becomes possible. As Liesl Olson writes, glossing James's position, "according to James, habits are ways in which individuals make choices based on their own practical experience, not on some higher ideology or abstract design" (330). The question, however, of how an individual can be capable of making a choice, rather than always being determined, is a central concern of James's ethics. On the one hand, James's notion habit allows him to articulate a philosophy of immanence, where knowledge occurs within the tissue of experience. Yet on the other, in the problem of decision, where, as Olson puts it, "individuals make choices," James introduces a principle that is, itself, irreducible to habitual association.

I have spoken as if our attention were wholly determined by neural conditions. I believe that the array of *things* we can attend to is so determined. No object can *catch* our attention except by the neural machinery. But the *amount* of the attention which an object receives after it has caught our mental eye is another question. (*Briefer Course*, 104)

While the range of possible objects is determined by neural conditions—by habitual webs of association—the drama of voluntary life depends upon a free quality, "a spiritual force" (*Briefer Course* 104) that allows the subject to direct his attention between the various possibilities that appear within the "neural machinery."

James understands both the structure of the "neural machinery" that presents objects to attention, and the function of the "spiritual force" that controls attention, in terms of the

equilibrium of an energetic system. The relation expressed through habit, as James's base unit of experience—the associative pattern within which experience appears—is understood as a relation within circuits of energy. Energy, that is, becomes the immanent term, for James, through which these relationships are understood. As James writes, “the term energy doesn't even pretend to stand for anything 'objective'. It is only a way of measuring the surface of phenomena so as to string their changes on a simple formula” (*Principles*, 103). Energetics becomes, for James, the privileged metaphor for understanding both neurophysiology and the relationship of this physiological system to the conscious subject. As Sergio Franzese writes, of James's use of the language of energy,

“In the *psychological* use we find a *nervous* (neural) *energy* and a *spiritual energy*, referring both to the inner core of the self and to the intensity of muscular or mental action: the problematic phenomenon of effort of attention, as well as any overcoming of difficulties, obstacles, or hindrances, physical or moral, is an expression of energy. *Habit* and *self-control* are regarded as potential, or stored, or saved energy” (164).

James thus understands the problem of human perception, emotion, through the model of habitual circuits of energy inscribed within the neural apparatus. For James, human psychology can be understood as a problem of energy precisely because the human brain is a system governed by laws of energetic equilibrium.

The human, for James, differs from animals in that multiple associative patterns—or said differently, multiple habitual tendencies—exist within the human brain. As James writes, the fact of these competing tendencies introduces instability into the human.

But what are now the defects of the nervous system in those animals whose consciousness seems most highly developed? Chief among them must be *instability*. The cerebral hemispheres are the characteristically 'high' nerve-centres, and we saw how indeterminate and unforeseeable their performances were in comparison with those of the basal ganglia and the cord. But this very vagueness constitutes their advantage. They allow their possessor to adapt his conduct to the minutest alterations in the environing

circumstances, any one of which may be for him a sign, suggesting distant motives more powerful than any present solicitations of sense. (*Principles*, 139)

For a lower animal, the brain is a stable structure: both the animal's attention and activity are determined by a simple neurological representation of the environment. The human, however, is attuned to subtle signs, which may refer him to other situations, to other complexes of memories, habits and desires that do not immediately appear in the environment, but which are symbolically represented in the environment. The human thus experiences a wandering state of attention; the environment does not suggest a single mode of action, a single object of attention, but rather a myriad of unstable alternatives, of possible habitual responses, each vying for the subject's attention.

When James speaks of what it means to occupy a specific habit, he again uses the language of energetics.

My soul stands now planted in what once was for it a practically unreal object, and speaks from it as from its proper habitat and centre [...]. What brings such changes about is the way in which emotional excitement alters. Things hot and vital to us to-day are cold to-morrow. It is as if seen from the hot parts of the field that the other parts appear to us, and from these hot parts personal desire and volition make their sallies. They are in short the centres of our dynamic energy, whereas the cold parts leave us indifferent and passive in proportion to their coldness.

Whether such language be rigorously exact is for the present of no importance. It is exact enough, if you recognize from your own experience the facts which I seek to designate by it. Now there may be a great oscillation in the emotional interest, and the hot places may shift before one almost as rapidly as the sparks that run through burnt-up paper. (*Varieties*, 196)

In other words, within the unstable neural system, multiple centers of energy compete for dominance. James proposes to call "the group of ideas to which he devotes himself, and from which he works, [...] *the habitual centre of his personal energy*" (196). If two potential centers compete to be the "habitual centre" of energy, then the self becomes "wavering and divided"

(196). Consciousness has the goal both of bringing equilibrium to the instability of the neural system, and of motivating shifts in equilibrium that allow for the adoption of new ideas. It is consciousness, in other words, that is responsible for managing instability in order to bring about shifts in equilibrium.

In the end we fall back on the hackneyed symbolism of a mechanical equilibrium. A mind is a system of ideas, each with the excitement it arouses, and with tendencies impulsive and inhibitive, which mutually check or reinforce one another. The collection of ideas alters by subtraction or by addition in the course of experience, and the tendencies alter as the organism gets more aged. A mental system may be undermined or weakened by this interstitial alteration just as a building is, and yet for a time keep upright by dead habit. But a new perception, a sudden emotional shock, or an occasion which lays bare the organic alteration, will make the whole fabric fall together; and then the centre of gravity sinks into an attitude more stable, for the new ideas that reach the centre in the rearrangement seem now to be locked there, and the new structure remains permanent.

Formed associations of ideas and habits are usually factors of retardation in such changes of equilibrium. (*Varieties*, 197)

It is in choosing between these various habits, these competing centers of dynamical energy, that the problem of consciousness arises. As James writes, “the mind is at every stage a theater of simultaneous possibilities. Consciousness consists in the comparison of these with each other, the selection of some, and the suppression of the rest by the reinforcing and inhibiting agency of Attention” (*Essays on Psychology*, 51).

In suggesting that we understand the instability of the energetic system which is the human mind as a “theatre of possibilities,” before which a disinterested consciousness can exert a spiritual force, William James appeals to the terms of a then current debate over whether an actor should remain cold, and detached from, the emotions he portrays—a position advocated by the French actor Constant Coquelin—or whether he should give himself over to the emotions of the role—a position advocated by the Scottish author William Archer. The question of the actor

will become important for James as he works to understand how it is that consciousness might choose between the various responses represented in the “theatre of possibilities.” Coquelin’s position, which is derived from Denis Diderot’s *The Paradox of Acting*, suggests that there is another factor, beyond affective response, involved in consciousness.

In Coquelin’s 1880 treatise on acting (the translation of which begins with an introduction written by Henry James), Coquelin writes that

The theatrical world is divided into two opposing camps in regard to the question whether the actor should partake of the passions of his part,—weep himself in order to draw tears,—or whether he should remain master of himself through the most impassioned and violent action on the part of the character which he represents; in a word, remain unmoved himself, the more surely to move others, which forms the famous paradox of Diderot. (55-56)

Diderot’s paradox proposes that the actor “must have in himself an unmoved and disinterested onlooker” (Diderot, 14). This unmoved onlooker is the constant observer of the actor’s own voice. “At the moment that he touches your heart he is listening to his own voice; his talent depends not, as you think, upon feeling, but upon rendering so exactly the outward signs of feeling, that you fall into the trap”(Diderot, 19). Coquelin writes that “I hold this paradox to be the literal truth” (57). The emotions are, for Coquelin, nothing but “material to be utilized” (61), and the relationship between an actor and his emotions are “as separate a thing as the painter and his canvas” (56). Diderot’s paradox holds that the actor possesses a “dual consciousness.” The actor must at once act as poet, as the unmoved mover who pulls the strings, and as the puppet who gives the outward show of emotions. Coquelin continues that “it is from within that he moves the springs which make his character express the whole gamut of human consciousness; and all these springs, which are his nerves, he must hold in hand, and play on as best as he can” (57).

In his arching history of acting theory, at the center of which is Diderot's *Paradox*, Joseph Roach writes that

it is helpful to note that Diderot's formulation of dual consciousness demonstrates the inappropriateness of attempts to identify his psychology of the actor with William James's theory of emotion. James, it will be recalled, rejected the separation of the mental experience of an emotion from its physiological symptoms, while advancing the related proposition that "any voluntary arousal of the so-called manifestations of a special emotion ought to give us the emotion itself." By contrast, Diderot identified the separation of manifestation from the mental experience as the measure of an actor's art [...]. This freedom of mind, a calm at the center that persists despite whatever paroxysms the body suffers outwardly, constitutes, in the argument of the *Paradoxe*, the sine qua non of great acting. (148)

As Roach argues, James' description of the emotions seems to be at odds with Diderot's paradox. And yet William James's ethics, as much as Diderot's paradox, depends upon a mastery of the emotions. If for James, as Roach suggests, the experience of an emotion follows from the physiological manifestation of an emotion, then James's ethical stance depends upon locating a moment of consciousness, however brief, outside of the rule of emotions.

However, when James considers Diderot's *Paradox* as potential evidence against his theory of the emotions, he does not oppose himself to Diderot, but rather uses Diderot's Paradox to articulate the existence of a "spiritual force" that will allow one to choose between possible centers of "personal energy."

If our theory be true, a necessary corollary of it ought to be this: that any voluntary and cold-blooded arousal of the so-called manifestations of a special emotion ought to give us the emotion itself. Now this (the objection says) is not found to be the case. An actor can perfectly simulate an emotion and yet be inwardly cold; and we can all pretend to cry and not feel grief; and feign laughter without being amused. (113)

To orient himself within this 'objection,' James places himself between Coquelin, as representative of Diderot's paradox, and William Archer's *Masks or Faces*, which relies upon a statistical survey of actors to demonstrate that, contra Diderot, actors do, indeed, feel the

emotions they represent. James explains this “discrepancy amongst actors” by supposing that “The *visceral and organic* part of the expression can be suppressed in some men, but not in others, and on this it is probably that the chief part of the felt emotion depends. Coquelin and the other actors who are inwardly cold are probably able to effect the dissociation in a complete way” (116). James suggests that certain physiological changes are more important for the experience of an emotion than are others. Some actors—like Coquelin—can suppress the visceral component of an emotion, while embodying the superficial form of an emotion.

For both Coquelin and Archer, James suggests, there is a divide between a subject capable of willing an emotion, and a subject who experiences the emotion. Archer, that is, suggest that there exists a temporal split between the subject who wills the emotion, and the subject who experiences the emotion, between the emotionally unaffected subject who wills a change in his physiognomy, and the subject who experiences the change in physiognomy. Coquelin, in contrast, suggests a logical split between the willing subject and the emotional subject, where the willing subject is the unmoved mover, the emotional subject, that which is moved. James collapses the difference between Archer and Coquelin, to propose that it does not matter whether one is, or is not, affected by the change in physiognomy, but rather whether one is “at home” in the moment of willing, or, rather, in the moment of emotion.

Coquelin writes that “the artist’s brain must remain free, and all emotions, even his own, must expire on the threshold of his thought” (58). The result is that the actor evidences a “mutual independence of head and heart” (59). Offering an example of this ‘professional’ attitude towards experience Coquelin writes, of the actor Talma, that

It is said that when he learned of the death of his father, he uttered a piercing cry; so piercing, so heartfelt, that the artist always on the alert in the man, instantly took note of it, and decided to make use of it upon the stage, later on. This characteristic trait shows us the artist looking down

upon his own emotions and studying them, as it were from a superior plane, yielding to them that he might store them up for future use and reference. (59)

From this “superior plane,” the actor is able to experience emotions, and then use them to attain certain effects. The actor, who is able to observe and use emotional responses without being filled with passion—for “the natural effect of passion is to destroy all self-government” (61)—acts as “master and monarch of all of humanity within him” (60). He “needs not to be actually moved.” He is, rather, the unmoved mover, a divine king, who, as exception to the law of emotion, is able to reign over emotion. In James’s terminology, Coquelin is able to effortlessly control shifts in the equilibrium of his mind.

James begins the chapter “The Divided Self, and the Process of its Unification” from *The Varieties of Religious Experience* with a version of the same story.

“Homo duplex, homo duplex!” writes Alphonse Daudet. “The first time that I perceived that I was two was at the death of my brother Henri, when my father cried out so dramatically, ‘He is dead, he is dead!’ While my first self wept, my second self thought, ‘How truly given was that cry, how fine it would be at the theatre.’” I was then fourteen years old.

“This horrible duality has often given me matter for reflection. Oh, this terrible second me, always seated whilst the other is on foot, acting, living, suffering, bestirring itself. This second me that I have never been able to intoxicate, to make shed tears, or put to sleep. And how it sees into things, and how it mocks.” (141)

This “horrible duality” must be unified, yet it is important, James suggests, that the unity be the unity of a hierarchically ordered system, not a unity that resolves the impasse between these two selves. As James continues, “[t]he higher and the lower feelings, the useful and the erring impulses, begin by being a comparative chaos within us—they must end by forming a stable system of functions in right subordination”(143). For James, that is, the dysfunctional subject, the subject haunted by mocking voices, who gives into impulses, resembles nothing so much as a bad actor. In his chapter on the will, James gives the example of an incarcerated alcoholic who

cuts off his own hand, knowing that the warden will give him a drink to stop the pain. This is a man ruled by emotion, who is unable to assume a disinterested position. Likewise, in Alphonse Daudet's story, the problem is not the fact that the self is divided, but that Daudet identifies with the emotion, rather than with the disinterested voice of the second self. The subject is divided, in other words, because within the unstable neural system of the human, different centers compete for attention. While Coquelin is able to effortlessly manage shifts in equilibrium, identifying with a disinterested voice, Daudet, like the immoral and weak alcoholic, identifies with an emotional response, even as he continues to hear the mocking, disinterested voice of the second self. Rather than identify with the cold, super-egoic voice, the voice becomes a mark of division, as the sensualist's attention continues to be directed by his affective response.

Following his discussion of the role of emotion in actors, James turns to consider the role of the emotions in aesthetic appreciation. He wonders, following Ruskin, why it often seems that the people most unsuited to true religious feeling often seem to have an emotional response to works of art, while people of religious feeling often have no emotional response. James writes that

in every art, in every science, there is the keen perception of certain relations being *right* or not, and there is the emotional flush and thrill consequent thereupon. And these are two things, not one. In the former of them it is that experts and masters are at home. The latter accompaniments are bodily commotions that they may hardly feel, but that may be experienced in their fullness by *cretins* and philistines in whom the critical judgment is at its lowest ebb. (122)

The notion that one could either be “at home” in judgment, or in the emotional flush, again, effectively effaces the distinction between Archer and Coquelin. Even though some actors, we might say, are unable to fully disassociate the capacity for judgment from an emotional response, the master locates himself—is “at home”—in the judgment of correct relationships, rather than in

the emotional response that may arise, as a secondary reaction. It is only, in other words, “cretins and philistines” who are limited to an emotional response. The threat of an emotion that cannot be understood, of an experience that is outside of the subject’s understanding, is kept at bay in this discourse of mastery.

Within this theatre, the subject can either be guided by an ideal, or by propensities. James writes that if “we class all springs of action as propensities on the one hand and ideals on the other” it becomes clear that “the sensualist never says of his behavior that it results from a victory over his ideals, but the moralist always speaks of his as a victory over his propensities” (549).

The sensualist uses terms of inactivity, says he forgets his ideals, is deaf to duty, and so forth; which terms seem to imply that the ideal motives per se can be annulled without energy or effort, and that the strongest mere traction lies in the line of the propensities. The ideal impulse appears, in comparison with this, a still small voice which must be artificially reinforced to prevail [...]. The [ideal impulse] is *made great* by the presence of a great antagonist to overcome. And if a brief definition of ideal or moral action were required, none could be given which would better fit the appearances than this: *It is action in the line of the greatest resistance.* (*Principles*, 549)

As Carlson writes, for James “moral action requires the subordination of certain sensual desires to the demands of a higher ideal and entails effort to overcome the motives provided by ordinary pleasures and pains” (376).

When a dreadful object is presented, or when life as a whole turns up its dark abysses to our view, then the worthless ones among us lose their hold on the situation altogether, and either escape from its difficulties by averting their attention, or if they cannot do that, collapse into yielding masses of plaintiveness and fear. The effort required for facing and consenting to such objects is beyond their power to make. But the heroic mind does differently. (*Briefer Course*, 326)

While to be ruled by ordinary pleasures and pains is to attend to the easiest object, the ethical choice is to oppose the habitual—automatic—determination of action by attending to difficult

object. For James, freedom of will depends upon a formal distinction: the subject who is ruled by habits chooses based upon his interests while the ethical subject chooses in opposition to his emotional interests. Where the sensualist, who forgets his ideals, identifies with the “heat” of an emotional response, the moralist, touched by the “corpse-like finger of “Reason” and inspired by “still small voice” remains cold, dispassionately removed from the various centers of habitual energy that he takes as possible objects.

II. Heroic Saints and Disgusting Bodies

While the sensualist, like an animal, responds to his environment, it is the saint who is able to respond to things that are “unseen.” James writes that “the saintly character is the character for which spiritual emotions are the center of the personal energy” (*VRE*, 204), and that “the most inimical critic of the saintly impulses whom I know is Nietzsche. He contrasts them with the worldly passions as we find these embodied in the predaceous military character, altogether to the advantage of the latter” (*VRE*, 272).

Dislike of the saintly nature seems to be a negative result of the biologically useful instinct of welcoming leadership, and glorifying the chief of the tribe. The chief is the potential, if not the actual tyrant, the masterful, overpowering man of prey. We confess our inferiority and grovel before him. We quail under his glance, and are at the same time proud of owning so dangerous a lord. Such instinctive and submissive hero-worship must have been indispensable in primeval life. In the endless wars of those times, leaders were absolutely needed for the tribe's survival. If there were any tribes who owned no leaders, they can have left no issue to narrate their doom. The leaders always had good consciences, for conscience in them coalesced with will, and those who looked on their face were as much smitten with wonder at their freedom from inner restraint as with awe at the energy of their outward performances.

Compared with these beaked and taloned graspers of the world, saints are herbivorous animals, tame and harmless barn-yard poultry. They are saints whose beard you may, if you ever care to, pull with impunity.

(VRE, 272)

James's genealogy serves two distinct purposes. On the one hand, James suggests that the Nietzschean "beaked and taloned graspers" served a purpose in the days of tribal warfare, but perhaps no longer. As James writes, "From the biological point of view, St. Paul was a failure, because he was beheaded. Yet he was magnificently adapted to the larger environment of history" (*Varieties*, 367), a larger environment in which, as Franzese writes, "the Nietzschean 'strong man' would be harmful and dangerous" (196). While James gives an evolutionary critique of the Nietzschean "hero," he equally offers a new interpretation of heroic life.

James's view instead is that all excesses tend to be vicious and, according to the layman's ethical perspective, a healthier energetic equilibrium is more advantageous and ethically correct for our ordinary life. The well-balanced distribution of one's own interests, leading to a proportionate development of the self, is more advantageous for most lives than a life full of idiosyncratic bursts of overflowing energy. (Franzese, 187)

While Nietzsche's "hero" acts on these "bursts of overflowing energy," James's "hero" has something more of the saint in him. The Nietzschean hero, given to "idiosyncratic bursts of overflowing energy" might have been an important type in the tribal history of humanity, but is now the disorganized tyrant, or sensualist. For James, the "heroic" mind is precisely the mind that is able to establish an equilibrium of energies.

While Gilles Deleuze does not understand Nietzsche as framing an argument between a "strong man" and a "saint," he does, like James, understand him as opposing "well-balanced" "energetic equilibrium" to "bursts of overflowing energy." In his reading of Nietzsche, Deleuze writes that while "Nietzsche understood physical science, the energetics and thermodynamics of his time [...] it is now clear that he dreamt of a fire machine completely different from the steam engine"(30). Whereas the steam engine is governed by the laws of thermodynamics, the "Fire Machine," would seem to be a kind of inexhaustible engine ungoverned by, and always in excess

of, the laws of thermodynamics. The terms of the disagreement between James and Nietzsche are clear: whereas James takes the side of an intellectual equilibrium against the excesses of the body, Nietzsche takes the side of the body against an intellectual equilibrium.

In 1910 Henry Adams, who had taught medieval history at Harvard, published a book entitled *A Letter to Teachers of History*, in which he argued that history should be understood in terms of the second law of thermodynamics. “In 1852, Thomson contented himself by saying that a restoration of energy is ‘probably’ never effected by organized matter. In 1910, there is nothing ‘probable’ about it; the fact has become an axiom of biology”(201). While “In 1852, any University professor would have answered” the proposal that society functions according to the laws of thermodynamics with the “dry remark that society was not an organism and that history was not a science, since it could not be treated mathematically”(201). However, he proposes, for the modern university professor, “if the entire universe, in every variety of active energy organic and inorganic, human or divine, is to be treated as clock-work that is running down, society can hardly go on ignoring the fact forever”(203).

In a letter to Adams, in June of 1910, James takes issue with Adams’s claim that one can identify the tendency of human history with the entropic heat death of the universe. While the end of the universe is irrelevant to human history, James suggests the goal of humanity can be understood as a certain state of equilibrium. It is not the quantity of energy in the universe that is important for human history, but its distribution.

I protest against your interpretation of some of the specifications of the great statistical drift downwards of the original high level energy.
[...]

To begin with, the AMOUNT of cosmic energy it costs to buy a certain distribution of fact which humanly we regard as precious, seems to be an altogether secondary matter as regards the question of history and progress. Certain arrangements of matter on THE SAME ENERGY-LEVEL are, from the point of view of man's appreciation, superior, while

others are inferior.

[...]

The 'second law' is wholly irrelevant to 'history,' save that it sets a terminus; for history is the course of things before that terminus, and all that the second law says is that, whatever the history, it must insert itself between that initial maximum and that terminal minimum of difference in energy level. As the great irrigation-reservoir empties itself, the whole question for US is that of the distribution of its effects—of WHICH rills to guide it into; and the size of the rills has nothing to do with their significance. Human cerebration is the most important rill we know of, and both the 'capacity' and the 'intensity' factor thereof may be treated as infinitesimal. Yet the filling of such rills would be cheaply bought by the waste of whole sums spent in getting a little of the down-flowing torrent to enter them. Just so of human institutions; their value has in strict theory nothing whatever to do with their energy-budget—being wholly a question of the form the energy flows through. Though the ULTIMATE state of the universe may be its vital and psychical extinction, there is nothing in physics to interfere with the hypothesis that the PENULTIMATE state might be the millennium—in other words a state in which a minimum of difference of energy-level might have its exchanges so skillfully canalizes that a maximum of happy and virtuous consciousness would be the only result. In short, the last expiring pulsation of the universe's life might be, 'I am so happy and perfect that I can stand it no longer.' You don't believe this and I don't say I do. But I can find nothing in 'Energetik' to conflict with its possibility. You seem to me not to discriminate, but to treat quantity and distribution of energy as if they formed a single question.” (Letter W.J. To H. Adams, June 17, 1910)

The ethics of energy that James puts forward is almost identical to William Thomson's ethics of energy. As for Thomson, who proposes that “the directional flow of energy through space offered human beings the opportunity of directing, though not restoring, those mighty gifts of the Creator” (Smith, 101), James writes that “as the great irrigation-reservoir empties itself, the whole question for US is that of the distribution of its effects—of WHICH rills to guide it into.” As in his neural ethics, human must manage an “instability” within the “‘high' nerve-centres” (*Principles*, 139), effecting “changes of equilibrium” (*Varieties*, 197) in order to achieve a state of virtue and happiness. Regardless of whether the end of history is the equilibrium of thermodynamic heat death, the “millennium” is, itself, understood as a certain balanced

distribution of energy.

In his *The Vicious Circle*, Pierre Klossowski reads Nietzsche as torn between the fact of his body, as a scene of disorganized energies, and a scene of consciousness. As Klossowski writes, “all evil and suffering are the result of the quarrel between the body's multiplicity, with its millions of vague impulses, and the interpretive stubbornness of the meaning bestowed on it” (33). Whereas for James, the goal of humanity is to bring equilibrium to an unstable system, Nietzsche takes the side of excess, of a “chaos of impulses,” against the equilibrium of a balanced system.

Nietzsche experienced this dissolving confrontation between somatic and spiritual forces for a long time, and he observed it passionately. The more he listened to his body, the more he came to distrust the person the body supports. His obsessive fear of suicide, born out of the despair that his atrocious migraines would never be cured, amounted to a condemnation of the body in the name of the person being diminished by it. But the thought that he had not yet finished his life's work gave him the fortitude to side with the body. If the body is presently in pain, if the brain is sending nothing but distress signals, it is because a language is trying to make itself heard at the price of reason. A suspicion, a hatred, a rage against his own consciousness and reasonable person was born. This person—fashioned by a particular epoch, in a familial milieu he increasingly abhorred—is not what he wanted to conserve. He would destroy the person out of a love for the nervous system he knew he had been gifted with, and in which he took a certain pride. By studying the reactions of his nervous system, he would come to conceive of himself in a different manner than he had previously known—and indeed, in a manner that will perhaps never again be known. Consequently, he developed a mode of intelligence which he wanted to submit to exclusively physical criteria. He not only interpreted suffering as energy, but willed it to be so. Physical suffering would be livable only insofar as it was closely connected to joy, insofar as it developed a voluptuous lucidity: either it would extinguish all possible thought, or it would reach the delirium of thought. (*Vicious Circle*, 24-5)

As for James, the conflict is between the person and the nervous system, between the body, and the consciousness the body supports. Whereas for James these “millions of vague impulses” must be brought under the control of a “meaning,” for Nietzsche the horizon of thought is

precisely the cultivation of these impulses, supported by the conviction that these impulses themselves signify: from within the impulses and energies consciousness perceives that “a language”—a language of the body—“is trying to make itself heard at the price of reason”(*Vicious Circle*, 24).

Winfried Menninghaus suggests that we should understand the relationship between the “person” and “the body that supports it” in terms of disgust. Disgust, in other words, is the person's disgust for the body. As Menninghaus writes, quoting liberally from a series of Nietzsche's untranslated notebooks,

Aesthetic judgment—this at least Nietzsche's opinion in the *Gay Science*—makes no demands; rather, it promises something—and indeed bestows it. In contrast, moral judgment subsumes aesthetic distinctions to the demands issuing from the position of 'truth': 'The beautiful, the disgusting, etc. is the older judgment. As soon as it is appropriate by *absolute truth*, the aesthetic judgment is inverted into moralistic *demand*.' Then “the *aesthetically* offensive quality of the inner man without his skin—bloody pulp, fecal bowels, entrails”—leads to the imperative of exclusion: “Hence *away with it in thought*.” In this case, the aesthetic judgment of the body shifts into a “prejudgment” of it: “All excretions disgusting...disgust increasing with refinement. The functions linked to this also disgusting.” Placing moral demands on the body thus institutes shame and disgust at one's own physical nature. (156)

Nietzsche and James agree, it would seem, on the relationship of moral judgment to the body. For both, moral judgment is opposed to the physical nature of the body. As James writes, the characteristic “instability”(*Principles*, 139) of the “nervous system” is a “defect” of the higher animals. As James continues, “[t]he higher and the lower feelings, the useful and the erring impulses, begin by being a comparative chaos within us—they must end by forming a stable system of functions in right subordination”(143). The moral man brings a hierarchical order to the chaos of the impulses. Whereas James takes the side of moral judgment against the chaos of the impulses, Nietzsche, appealing to aesthetic judgment, takes the side of the body, of the

disgusting inner man, against the moralism of the ideal.

III. James, Wilde, Stein, and the Aesthetics of the Decomposing Body

In what follows, I turn to a constellation of literary texts, which I will argue all respond to William James's description of the nervous system as a thermodynamic system. The nervous system is either understood as a system that is brought into equilibrium by the moral ideal, or which exerts itself as a disorganized chaos. As in the terms of Deleuze's reading of Nietzsche, the nervous system is either a "fire machine" or a "steam engine"(30), it is either the perpetual motion of a energy that is always in excess of control, or a system regulated by laws of equilibrium.

In his *The Tragic Muse*, Henry James, like his brother, proposes an ethics of mastery, based on the self-control of the actor who ascribes to Diderot's *Paradox*. Like William James, Henry James proposes a heroic position that overcomes the disorganization of the sensualist. Oscar Wilde's *The Picture of Dorian Gray*, which was written just after *The Tragic Muse* was published, offers a complex parody of the ethics of mastery that Henry James puts forward. While both Henry and William James argue that the heroic mind can dispassionately master habits and impulses, Dorian Gray loses himself to the habits that he is unable to master. In terms of Menninghaus's reading of Nietzsche, *The Picture of Dorian Gray* offers a parody of the equivalence of moral purity and aesthetic beauty. Wilde develops the problematic of a disgust for the "inner man," where the moral demand of aesthetic beauty results in the grotesque face, stained with Dorian's sin, which fills Dorian with shame and disgust. *The Picture of Dorian Gray*, however, stops short of developing a true aesthetic of the disorganized and disgusting

body. The horrifying transformation of Dorian's magical portrait does not function to elevate the disorganized "inner man" as an aesthetic object, but rather to critique a notion of moral mastery that Wilde finds in Henry James. It is in Gertrude Stein's "Melanctha," which I will argue directly responds to William James's ethics of mastery, that the disorganized body is developed as not merely a critique, but as an aesthetic body in its own right, turning the failure of an ethics of mastery, and the body that this failure produces, into the basis for a certain modernist aesthetic.

The Tragic Muse opens as Nick Dormer has "come to a crisis." Nick's father had held a seat in parliament. After his father's death, Nick briefly held, and then lost, this seat, and he now lives in Paris where he pursues a dilettantish career as a painter, searching for a Paternian "unity of art" which aims at "quicken[ing] sensibility" (19). The crisis comes when Mr. Pinks, who won the seat in the general elections, dies. Julia Dallow, Nick's love interest, wants Nick to stand, and, along with his father's friend, Mr. Carteret, they are prepared to supply him with sufficient financial backing. Nick's mother and sister, who are quickly running out of money, depend upon Nick to stand, for if he stands he will become doubly wealthy: not only is Julia Dallow rich, but Mr. Carteret, who thinks of Nick as the son he does not have, will make Nick his heir if Nick becomes a successful politician. Just before hearing the news of Mr. Pinks' death, Nick meets Gabriel Nash, an Oxford aesthete who has taken Miriam Rooth, an aspiring actress, under his wing. Nick is, thus, faced with a dilemma: Will he take on a political career, the career expected of him by Julia Dallow, Mr. Carteret, and his mother, or will he follow the artistic path laid out by Gabriel Nash and Miriam Rooth?

For James, of course, this is a clear ethical choice. To develop the ground of certainty upon which this choice will proceed, James appeals to the artistic development of Miriam Rooth.

An ethics, that is, emerges out of the structure of the actor's consciousness. Miriam Rooth, who aspires to be the "English Rachel," is modeled after Rachel, the celebrated actress of the French Comedy who, as Rachel Brownstein writes, was "in the history of the European theatre [...] the first international dramatic star"(4). Under the tutelage of the aged and retired actress Madame Carré, who ascribes to Diderot's theory of the actor's divided consciousness, Miriam will become a star of the modern stage.

In an 1887 essay introducing Coquelin to the American stage, Henry James writes that Coquelin

is a master whom one watches very much as one watches some supreme dancer or trickster on the vertiginous tense wire feeling him as certain to pile danger high as not to risk his neck by excess. This safe playing with the danger of excess—which is a defiance of the loss of balance under exhilaration—connects itself with the actor's command of the effects that lie entirely in self-possession, effects of low tone, indications of inward things. (12)

It is in these terms that James introduces Madame Carré.

The old actress presented herself to a casual glance as a red-faced woman in a wig, with beady eyes, a hooked nose, and pretty hands; but Nick Dormer, who has a perception of physiognomy, speedily observed that these free characteristics included a great deal of delicate detail—an eyebrow, a nostril, a flitting of expressions, as if a multitude of little facial wires were pulled from within. (82)

In the language of Diderot's double consciousness, Madame Carré seems a puppet controlled from some secret internal locus. Madame Carré is initially aghast at Miriam's performance, and proclaims that "I didn't perceive in what she did a single nuance, a single inflection or intention" (93). However, she makes clear that natural talent is not important for the development of the actor. Against the claim of natural talent, Madame Carré appeals to Rachel. Rachel is

the very instance that proved her point—a talent embodying one or two primary aids, a voice and an eye, but essentially formed by work, unremitting and ferocious work. 'I don't care a straw for your handsome

girls,' she said: 'but bring me one who is ready to drudge the tenth part of the way Rachel drudged, and I'll forgive her her beauty. (92-93)

The actor's ability to occupy a position outside of experience is not due to some special physiognomic constitution, but, rather, to hard work. The split in consciousness that allows one to master emotion, to turn life into performance, inheres in any subject, waiting to be cultivated. Thus it is that Miriam, through hard work, manages, over the course of the novel, to attain the control of expression and emotion that allows her to become the "English Rachel."

While Gabriel Nash downplays the importance of the theater in his hierarchy of the arts, James's aesthete, like Carré, Rachel, and Miriam, possesses the double consciousness of the actor. It is through Nash that Diderot's actor's aesthetic sensibility becomes a both a theory of consciousness and an ethic in the novel. Since the successful actor depends upon the cultivation of a double consciousness, it is a specific relationship between intention and material, rather than the kind of material product, which characterizes an artistic temperament. As Coquelin writes, "creation is one thing; durability another. Marble is more lasting than canvas, verses more enduring than marble, but time devours them all" (51). Thus emotions, while fleeting, are, for Coquelin, "material to be utilized" (61). This redefinition of the relationship between mastery and material defines the field within which the aesthete will appear. At the uncomfortable first meeting between Nick's fiancé, Julia Dallow, and Gabriel Nash, Dallow asks Nash if he is an artist.

'I try to be,' Nash replied, smiling; 'but I work in such a difficult material.'

He spoke this with such a clever suggestion of unexpected reference that, in spite of herself, Mrs. Dallow said after him—

'Difficult material?'

'I work in life!' (106)

Gabriel Nash's seeming withdrawal from life, his refusal to identify with the materials that are

being used—in the terms of Diderot’s Paradox, a refusal to identify with the emotions that are portrayed—is his assumption of a position from which any experience can become an object, a material, in which the subject can work. The aesthete does not care about production, but, rather, about assuming a structural position.

Julia Dallow wants to marry the next prime minister, and is worried that that, since Nick is only standing because she wants him to, he will have no great success. Nick agrees that he is doing what others expect from him, but insists that he is on ethically stable ground to take others’ desires as his own.

‘It isn’t only for you,’ he argued gently; ‘you’re a great deal, but you’re not everything. Innumerable vows and pledges repose upon my head. I’m inextricably committed and dedicated. I was brought up in the temple; my father was a high priest and I’m a child of the Lord. And then the life itself—when you speak of it I feel stirred to my depths: it’s like a herald’s trumpet. Fight with me, Julia—not against me! Be on my side, and we shall do everything. It is fascinating, to be a great man before the people—to be loved by them, to be followed by them. An artist isn’t—never, never. Why should he be? Don’t forget how clever I am.’ (298)

Nick continues that his desire for a political career is, in part, motivated by a fear of his mother: “she represents infinite possibilities of disappointment and distress. She represents all my father’s as well as all her own; and in them my father tragically lives again” (298). Nick insists that his desire to be loved by others, to win social approval, is a legitimate factor upon which to make decisions. Yet Julia is unconvinced.

It is ultimately Gabriel Nash who becomes the spokesperson for duty. When Nick tells Nash that he is considering becoming a politician in order to satisfy social demand, Nash reprimands Nick “for grossness of immorality” (266), and asks if Nick can “recognize in any degree the elevated idea of duty?” (265). Nick is surprised that Nash appeals to duty, for “duty is doing and I inferred that you think rather poorly of doing—that it spoils one’s style.” Nash

responds that “doing” is only a failure is one does “wrong.” He then offers a “cannon of certainty” through which one might know what one’s correct duty would be. Nash continues that “we must recognize our particular form, the instrument that each of us—each of us who carries anything—carries in his being. Mastering the instrument, learning to play it in perfection—that’s what I call duty, what I call conduct, what I call success” (266). “Duty,” for Diderot’s, and Coquelin’s, actor, is mastery of material. Since the material presented to Nick is his ability to paint—Nash remarks that his instrument, his ability to paint, is “a regular Stradivarius!”(267)—Nick’s duty, his imperative, is to master his instrument. The instrument one masters is irrelevant; the ethical subject is simply the subject who masters.

When Dorian Gray proposes, in a passage that echoes Coquelin’s manual on acting, that “it is only shallow people who require years to get rid of an emotion,” Wilde seems to take aim at James’s notion of aesthetic mastery. As Dorian continues, “a man who is master of himself can end a sorrow as easily as he can invent a pleasure. I don’t want to be at the mercy of my emotions. I want to use them, to enjoy them, and to dominate them” (89). In these terms, the continual transformation of the portrait of Dorian reveals Dorian’s failure, for while he claims to dominate the emotions that traverse him, the portrait becomes the evidence that he is indeed at the mercy of his emotions, dominated by his enjoyment. In his *Tame Passions of Wilde*, Jeff Nunakawa writes that Wilde does not work to attain “the seizing of desire but rather a vision of it softening, not a subject strong enough to control his passions, but rather species of passion that, by their very nature, are slight enough to be good as managed”(28). *The Portrait of Dorian Gray*, in its grotesque parody of the ethics of mastery that James puts forward in *The Tragic Muse*, suggests, likewise, that the passions that emerge “from cell to cell”(Wilde, 141) in the human brain cannot be mastered; all one can hope is that these passions remain benign, slight

enough to leave the aesthetic subject intact. Wilde's dual critique of Pater and James takes us to a scene of neural energies, of habits that are inscribed in the material substrate of the human mind.

For Pater, the problem involves neither the mastery of emotion, nor the “softening of desire.” This problem does not emerge for Pater, because he opposes the specificity of subjective experience to the muting of this specificity through habit. As he writes in the “Conclusion” to *The Renaissance*, “it might be said that our failure is to form habits: for, after all, habit is relative to a stereotyped world, and meantime it is only the roughness of the eye that makes any two persons, things, situations, seem alike” (152). In *The Picture of Dorian Gray*, Dorian, likewise, searches for a mode of experience outside of habit. Just as Pater insists that “the theory or idea or system which requires of us the sacrifice of any part of this experience, in consideration of some interest into which we cannot enter, or some abstract theory we have not identified with ourselves, or of what is only conventional, has no real claim on us” (153), Dorian “never fell into the error of arresting his intellectual development by any formal acceptance of creed or system” (Wilde, 106).

Wilde suggests that the world of “stereotyped habits” is precisely a “flameless” world. He narrates the experience of waking in the middle of the night, and taking account of silent bedroom.

The flameless tapers stand where we had left them, and beside them lies the half-cut book that we had been studying, or the wired flower that we had worn at the ball, or the letter that we had been afraid to read, or that we had read too often. Nothing seems to us changed. Out of the unreal shadows of the night comes back the real life that we had known. We have to resume it where we had left off, and there steals over us a terrible sense of the necessity for the continuance of energy in the same wearisome round of stereotyped habits, or a wild longing, it may be, that our eyelids might open some morning upon a world that had been refashioned anew in the darkness for our pleasure, a world in which things would have fresh shapes

and colours, have little or no place, or survive, at any rate, in no conscious form of obligation or regret, the remembrance even of joy having its bitterness and the memories of pleasure their pain. (Wilde, 105)

Wilde, that is, here suggests the opposition between the “flameless” world, where energy continues in the same “wearisome round of stereotyped habits,” and the dream of a world that is fresh, without history or regret. This “flameless” world has been leached of color precisely through repetition: the book has been studied, the wire flower too often considered, and the letter is a reminder of social convention. In the opening pages of the novel, Dorian considers a laburnum tree, “whose tremulous branches seemed hardly able to bear the burden of a beauty so flame-like as theirs” (Wilde, 18). The poisonous flowers of the laburnum tree present the temptation and lure of forbidden fruit, at once irresistible and deadly. As John Paul Riquelme writes, one element of Wilde's critique of Pater involves a shift in the valence of Pater's metaphor of the “flame” of experience.

Dorian's flame-like experiences as a child and later are painful or even infernal, not ecstatic in the way that Pater's “Conclusion” suggests. Wilde's references to flame evoke Pater, but the implications have been reversed. In *Picture*, it is not the flame of art and passion that we choose as our future. Instead, flames of an unpleasant kind have already made us what we are. The flame and its passionate intensity are destructive in Wilde, rather than being the salvation from destruction or a consolation for it. (621-2)

For Pater, as I have suggested, the opposition between the scene of the “flame of experience” and a world structured by “abstract theory” or convention carries a certain risk—as suggested for example by the Prior's madness in “Apollo of Picardy”—if it is not managed through a specific literary ethic that arises out of the impasse between these two scenes. Wilde suggests, in *The Picture of Dorian Gray*, that not only is the search for new experience deadly, but that it is deadly precisely because of the Paternian assumption of a border between experience, which Pater sees as registering a scene of perpetual and chaotic motion of impulses, and convention,

which Pater reads as a scene of equilibrium and balance, does not hold.

The novel, that is, while narrating the Paternian search for experience unburdened by convention or history, works to show that not only is this search deadly, but that the terms of the search, in the opposition between experience and habit, are themselves flawed, for the search for “fresh shapes and colours” (Wilde, 105) is itself motivated by circuits of neural energy that are themselves indistinguishable from convention or habit. As Lord Henry says to Dorian, “Life is not governed by will or intention. Life is a question of nerves, and fibres, and slowly built-up cells in which thought hides itself and passion has its dreams” (162). If Dorian is, as Lord Henry says, “a perfect type” (162), it is not because he turns away from habit, but because he gives himself over to the passions, thoughts, and habits that emerge out of the circuits of energy at work in Dorian's brain.

When Dorian's search for experience without history drives him to an opium den, his intellect becomes a kind of epiphenomenal translation of circuits of energy that take form in the cells of his brain.

It is said that passion makes one think in a circle. Certainly with hideous iteration the bitten lips of Doran Gray shaped and reshaped those subtle words that dealt with souls and sense, till he had found in them the full expression, as it were, of his mood, and justified, by intellectual approval, passions that without such justification would still have dominated his temper. From cell to cell of his brain crept the one thought; and the wild desire to life, most terrible of all man's appetites, quickened into force each trembling nerve and fibre. (141)

Rather than an escape from repetitive experiences and habitual actions, the language of “souls and sense,”—the language, presumably, of the flame-like laburnum—is itself the manifestation of a kind of neuronal habit. Not only does the search for an alternative to a “flameless” world of stereotyped forms lead Dorian into progressively destructive habits, but the search for experience is itself motivated by something that repeats in the cellular structure of Dorian's brain. There are,

at most, different scenes of habit; “the continuance of energy in the same wearisome round of stereotyped habits” (Wilde, 105) describes both the colorless world of convention, and Dorian's search for new experience.

This collapse of the distinction between the language of “flameless” convention and the “flame” of experience becomes central to Dorian's failed romance with the Sibyl Vane, the talented actress who loses her ability to act once she experiences a true emotion through her love of Dorian. While Pater opposes the “flame” of experience to stereotyped experience that “that makes any two persons, things, situations, seem alike” (152), the actor is precisely she who is able to represent the same stereotyped emotion on command, she who can represent without being touched by the emotion. When Sibyl experiences the “reality” of her love for Dorian, the imitations and repetitions of the theatre become subject, for her, to the same kind of critique that Dorian, and Pater, offer of the sterile world of stereotyped repetition.

“Dorian, Dorian,” she cried, “before I knew you, acting was the one reality of my life. It was only in the theatre that I lived. I thought that it was all true. I was Rosalind one night, and Portia the other. The joy of Beatrice was my joy, and the sorrows of Cordelia were mine also. I believed in everything. The common people who acted with me seemed to me to be godlike. The painted scenes were my world. I knew nothing but shadows, and I thought them real. You came—oh, my beautiful love!--and you freed my soul from prison. You taught me what reality really is. To-night, for the first time in my life, I saw through the hollowness, the sham, the silliness of the empty pageant in which I had always played. To-night, for the first time, I became conscious that the Romeo was hideous, and old, and painted, that the moonlight in the orchard was false, that the scenery was vulgar, and that the words I had to speak were unreal, were not my words, were not what I wanted to say. You had brought me something higher, something of which all art is but a reflection. (75)

In terms of a Paternian rhetoric of the impression, it would seem that Sibyl sees through the “hollowness” of theatrical repetition precisely because she is exposed to an experience that is uncontaminated by habit. Yet Wilde understands this supposed opposition between real love and

its semblance as precisely the domain of melodrama. Her affair does not deliver her from the theater, but rather serves to make her life, itself, theatrical. When Sibyl's brother, James, is worried that an affair with Dorian will ruin her life, Sibyl reacts by telling him that he seems “like one of the heroes of those silly melodramas mother used to be so fond of acting in” (63).

James is about to leave London and is anxious that he will no longer be able to watch over Sibyl. He therefore confronts his mother with his suspicions about her own extramarital affair with his and Sibyl's father, in order to remind her of the stakes of Sibyl's actions. His mother is horrified not at the fact of the question, but rather at its staging: “The situation had not been gradually led up to. It was crude. It reminded her of a bad rehearsal”(64). Her response—that James's and Sibyl's father was a “highly connected” (64) gentleman who failed to provide for them—motivates James to vow revenge if his sister is treated in a similar manner: “and believe me that if this man wrongs my sister, I will find out who he is, track him down, and kill him like a dog. I swear it”(65). Yet rather than hear this speech as compelling to action, Sibyl's mother is taken with the theatrical pathos of James's threat.

The exaggerated folly of the threat, the passionate gesture that accompanied it, the mad melodramatic words, made life seem more vivid to her. She was familiar with the atmosphere. She breathed more freely, and for the first time for many months she really admired her son. She would have liked to have continued the scene on the same emotional scale, but he cut her short. Trunks had to be carried down, and mufflers looked for. The lodging-house drudge bustled in and out. There was the bargaining with the cabman. The moment was lost in vulgar details. It was with a renewed feeling of disappointment that she waved the tattered lace handkerchief from the window, as her son drove away. She was conscious that a great opportunity had been wasted. She consoled herself by telling Sibyl how desolate she felt her life would be, now that she had only one child to look after. She remembered the phrase. It had pleased her. Of the threat she said nothing. It was vividly and dramatically expressed. She felt that would all laugh at it some day. (65)

James's threat excites her not because of its sincerity, but because it is such a convincing

imitation of a stereotyped dramatic scene. There is only the opposition between experience that is worthy of the stage, and the “vulgar details” of life.

Dorian, in turn, takes the same theatrical attitude toward his affair with Sibyl. When Sibyl, cast aside by Dorian, collapses, he thinks that “Sibyl Vane seemed to be absurdly melodramatic” (76). After she commits suicide, in an act of melodramatic excess, Dorian is—like Sibyl's mother in the scene with James—thrilled by the dramatic force of the incident: “How extraordinarily dramatic life is! If I had read all this in a book, Harry, I think I would have wept over it. Somehow, now that it has happened actually, and to me, it seems far too wonderful for tears”(83). Dorian's tragedy comes not as he turns away from habit towards the qualitative experience of his own impressions, but as he embraces repetition, as he gives himself over habit. Whereas James argues that habit can be mastered, that the impulses can be brought into a state of equilibrium, Wilde suggests that the energies of the human, forming circuits that run from “cell to cell” through the brain, are always out of control. Any attempt to control these emotions, to exert an intellectual position that is not affected by emotion and desire is mere hubris and hypocrisy.

III. Neurology, Will, and the Jewish Question

When William James distinguishing between the “cretins and philistines” who offer an emotional response—among whom James would surely place Dorian—and the heroic minded moralist, he evoke Matthew Arnold's language of cultural evaluation. Matthew Arnold suggests that the movement of history is a dialectic of Hellenism and Hebraism, and that both tendencies contribute to the progress of humanity. And yet, as Arnold writes, “Hellenism is of Indo-

European growth, Hebraism is of Semitic growth; and we English, a nation of Indo-European stock, seem to belong naturally to the movement of Hellenism” (95). Jonathan Freedman writes that Arnold associates the “middle class, Protestant spirit with the Hebraic” (46), and suggests that Arnold is chiefly concerned with restoring a Hellenism to an England dominated by Hebraic tendencies. For Arnold, the philistine pride in “the number of the railroads he has built, or the bigness of the Tabernacle he has built” (Arnold, 44), and the “bondage to machinery” (50), through which the “best self” (64) is hidden under the tyranny of our “everyday selves” become forms of the Hebraic obedience that the Hellenic spirit must overcome. The question of freedom and culture does not have anything to do with the question of whether one is (following Jewish law), or is not (following Christian law), allowed to marry one's deceased wife's sister—a question of perpetual parliamentary debate in Victorian England—but rather with a Hellenic overcoming of this bondage.

Yet at the same time that the “Hebraic” constitutes a bondage to “machinery,” the Jew, as unassimilable alien, becomes a figure of resistance to Hebraism. As Freedman writes,

when Arnold shifts from the language of the Hebrew and the Hellene to that of class—whose divisions he describes as those between Philistines, Barbarians, and populace—he also discerns the lineaments of a new class, a classless class, a class wholly devoted to the idea of culture rather than their own personal or partisan interests. (47)

Arnold describes this new class in a language that Freedman suggests emerges from the problem of Jewish assimilation. Arnold writes that “when we speak of ourselves as divided into the Barbarians, Philistine, and Populace, we must be understood always to imply that within each of these classes there are a certain number of *aliens*, if we may call them so.” This original figure for the alienated intellectual depends upon an association with the Jew, “that paradigmatic outsider in Europe’s new cultural dispensation” (47). The Jew not only serves to give body to a

topography of the alien within, but, as Freedman notes, “Jews work typologically in order to establish a genealogy for Arnold himself: his description of Heine as failed poet chimes with Arnold’s vision of his own poetic failures, and delineation of Spinoza’s expulsion from his own community eloquently glosses Arnold’s own cultural position vis-à-vis insular, “Hebraic” England of the nineteenth century” (47). Freedman continues that “the career of the Jew is not only that of the alien within, indistinguishable subversive of the cultural dominant, but that of the alien who stands in opposition to all forms of cultural inhibition and social power, the alien who affirms his alienness as the very ground of his being” (48).

A central moment in this identification comes, for Freedman, in Arnold’s sonnets, written in 1863, on the occasion of Rachel’s death. Arnold begins his third sonnet to Rachel by proclaiming that Rachel “Springs from the blood of Israel’s scattered race.” Precisely because her home is a “scattered race,” Rachel is able to move through any number of cultures.

Ah, not the radiant spirit of Greece alone
She had—one power, which made her breast its home!
In her, like us, there clashed contending powers,

Germany, France, Christ, Modes, Athens, Rome,
The strife, the mixture, in her soul are ours,
Her genius and her glory are her own. (*Poems*, 485)

Because of her identity as alien, Rachel possesses a “genius” that is “all her own,” and is protected from identifying with “clashed contending powers” through which she moves.

Rachel’s Hellenic spirit comes from the fact that she is Jewish. Henry James seems to draw the same conclusion, that aesthetic mastery is somehow related to “Israel’s scattered race,” in that Miriam Rooth, the model for a disinterested ethical stance in *The Tragic Muse*, is born “Roth.”

Through his characterization of the moralist, who responds to the “still small voice” of the “ideal impulse” to reconstitute the body as a new Israel, William James participates in this

tradition. The “still small voice” of the ideal impulse, a phrase that James repeats throughout the chapter on will, comes from *The King James Bible*. In “The Book of Kings,” Ahab, the king of Israel, has married a foreign woman, Jezebel, who turns him away from the true God to worship Baal. Elijah, the one prophet who remains true, returns to Israel from his hiding in the desert, to prove to Israel and Ahab that Baal is a false God. After Elijah performs miracles, and kills the priests of Baal, Jezebel threatens Elijah, and Elijah, frightened, runs to the desert to pray for his own death. Elijah is then instructed, in a dream, to go out and meet God. Elijah is met first by an earthquake, as a show of God’s power, “And after the earthquake a fire; but the LORD was not in the fire: and after the fire a still small voice” (1 Kings 19:12). This voice instructs Elijah to appoint new kings and prophets, and to orchestrate a slaughter of all in Israel who have ever followed Baal, so that only 7,000 faithful will live (1 Kings 19:17-18). The “still small voice” reconstitutes Israel by making war on the foreign element within it, by separating those who belong from those who do not. In James, the “still small voice” is the locus of a spiritual force, irreducible to “neural conditions” (Briefer Course, 104), which allows the subject to choose which object, that appears within the “neural machinery” (*Briefer Course*, 104), will receive attention. To continue James's metaphor, just as Elijah is responsible for bringing Israel in line with God, by killing the unfaithful, the heroic minded moralist is responsible for bringing the neural system into a correct hierarchical order, by dispassionately choosing which habits to include, and which to exclude, within a new, and superior, state of energetic equilibrium.

IV. Gertrude Stein's Israel

Whereas Henry James seems to adhere to William James ethics of Energy, and for

Dorian the tragedy is that he tries to master these impulses, Gertrude Stein will privilege the disorganized body of impulses. In James's appeal to the "still small voice" of the ideal impulse, James identifies the sovereign will with Israel, which, through the inclusion of some elements and the exclusion of others, forms the boundaries of the nation. In contrast, Stein's Israel is that which has been arbitrarily excluded. In an essay she wrote at Radcliff, "The Modern Jew who has given up the faith of his fathers can reasonably and consistently stand for isolation," Stein argues that even for the modern, secular Jew, assimilation is provisional. Stein writes that "[a] Jew admitted into the society of Gentiles is admitted on sufferance only. As long as they like him personally all is well, but the instant he does aught that is blameworthy, swiftly comes approbation, not only to the man, but to his race"(427). The Jewish nation provides the answer to this problem, for while "it is a degradation to be forced into isolation or to be suffered to escape from it, [...] it is a noble and worthy attitude, to embrace isolation and make the race felt as a great and noble power, ever working towards the highest and noblest in the vanguard of nations" (427). The paradox of the Jews as a "chosen people [...] without a chooser" (426) is resolved: the Jewish people are not chosen by a chooser, but by their exclusion and—involuntary—isolation.

While the Jewish nation is an excess that cannot be integrated into Gentile society, pride in isolation is not an attempt to compensate for a failure of assimilation. Stein returns to God's blessing of Abraham, to show that the isolation of the Jewish people is the basis of what is noble in the Jewish race.

God said to Abraham, "I am the almighty God; walk before me and be thou perfect and thou shalt be the father of many nations." It was this feeling of a great destiny in the sense of being a great power, a nation standing by itself, ethical, civilizing, blessing other nations but apart from them. These ideas were at the basis of the formation of the Jewish race, not a nation formed to disseminate a particular creed or type of worship, but a nation to stand

apart, to be with nations but not of them, to be ever in the fore-front of progress and enlightenment but not to mingle with others. (425)

Rather than a voice that tells Israel who to exclude in order to form a cohesive nation, Stein reads God's command as one to stand apart, to accept isolation. God's voice becomes, for the secular Jew, a myth that explains the idea, "at the basis of the formation of the Jewish race," that the Jewish nation will take itself as that which is excluded from the system of nation states.

While Stein was a lifelong opponent of Zionism, her understanding of the relationship between the Jewish nation and other nations relies upon terms that emerge through the Zionist debate. In the 1881 proto-Zionist pamphlet, "Auto-Emancipation: An Appeal to His People by a Russian Jew," published anonymously in German, Leo Pinsker addressed a growing resentment among the European Jewry over the failure of assimilation, and established a theoretical terrain that would prove important in the Zionist movement. Pinsker writes that

the essence of the problem, as we see it, lies in the fact that, in the midst of the nations among whom the Jews reside, they form a distinctive element which cannot be assimilated, which cannot be readily digested by any nation. Hence the problem is to find means of so adjusting the relations of this exclusive element to the whole body of the nations that there shall never be any further basis for the Jewish question. (193)

Pinsker continues that "The fact that, as it seems, we can mix with the nations only in the smallest proportions, presents a further obstacle to the establishment of amicable relations.

Therefore, we must see to it that the surplus of Jews, the unassimilable residue, is removed and provided for elsewhere" (193) through the establishment of "a home, if not a country of our own" (193). Pinsker understands the relationship between a system of nations—Europe—and the unassimilable excess—the Jews—through a digestive metaphor that seems to locate the problem of "surplus," of "unassimilable residuum" as a structural given.

Whereas James places his heroic mind on the side of an assimilating will that constitutes

the moral subject, Stein identifies with an unassimilable surplus, constituted by its exclusion from the system of nation states. Through an emphasis on racial identity, Stein opposes herself to a Zionism that, by making the Jewish nation a nation like any other nation, does away with the position of the Jews as “unassimilable residue.” It is through the figure of a racialized body that Stein preserves this position, through a racialized Jewish identity that she identifies with the exception, rather than with a figure of assimilating will.

Maria Farland notes that while critics often “stress Stein’s scientific work with William James as a catalyst for the representational strategies” (120) she would use in her literary career, “Stein’s work with James was a relatively minor episode in her scientific career, whereas her medical training spanned some five years” (120). Stein studied with William James at Harvard, before going to medical school at Johns Hopkins, where, in 1897, she was in the first class to admit women. At Hopkins, as Farland writes, the “neurologist Lewellys Barker assigned her the task of studying the nucleus of Darkeschwitsch of an infant brain, later incorporating her drawings and descriptions into his lengthy neurological textbook, *The Nervous System* (1899)” (121). Stein spent four years drawing a deep neural structure within the ocular motor system of the infant brain, a structure so complexly related to other sections of the brain that Barker offers only speculation about how neural pathways connect it to the brain, and which, a hundred and ten years later, has not been fully mapped. Farland continues that Stein’s work both in “the realm of experimental science and later in the realm of experimental literature would require that she shift her self-representation away from the conception that traits like abstraction inhere in the anatomical body toward a new emphasis on the function of those traits in the disembodied mind and in consciousness” (143). It is perhaps important to add that while for James there is a structure—modeled on “dual consciousness” of the actor and appealing to the metaphor of Israel

as elevated above other peoples—that provides a capacity for abstraction and brings these traits under a transcendental control, within the neurological milieu in which Stein worked, there are no clear answers for how “traits like abstraction inhere in the anatomical body.” The mapping of the brain remained a tentative technical exploration of a body whose complexity exceeded the limits of scientific knowledge. The identification with Israel as excluded from the assimilating system of nation states will become an identification with the unknown impulses and excitements of the brain, excluded by, and in excess of, James’s “heroic” will.

I will suggest that we can read Stein's early novella *Q.E.D.*, which Stein revised as the “Melantha” section of *Three Lives*, as taking up a version of Arnold's dialectic of Hebraism and Hellenism, where the Hellenic spirit, as a search for an ideal self, becomes associated with James’s heroic will, which is able to assume a position of disinterested judgment before experience. Whereas both Arnold and James understand Israel as a model for this disinterested position, Stein understands the exclusion of the Jew as a point of resistance to the heroic will. While James quips that “the sensualist never says of his behavior that it results from a victory over his ideals, but the moralist always speaks of his as a victory over his propensities”(549), I want to suggest that we can read Stein as offering a “victory over [...] ideals.” This is not, for Stein, a defense of “sensualism,” but rather an argument that aesthetic value lies in the unknown processes that cause the human, rather than in the mastery of these processes in the name of an ideal.

In *Q.E.D.*, the Jewish Adele makes light of the Anglo-Saxon Helen’s heroic tendencies, proclaiming that “not being myself of an heroic breed, I don’t somehow realize that type much outside of storybooks” (220). Not only does a disagreement over the value of heroism mark the failure of Adele’s and Helen’s relationship, but Stein’s use of names in *Q.E.D.*—Adel is German

for “nobility,” a term that Stein uses in her Radcliff essay to describe the Jewish race—suggests that the problem of heroism be understood as a structural impasse between Hellenism and Hebraism. When *Q.E.D.* is recast as “Melanctha,” Jeff Campbell replaces the Jewish Adele. Yet heroism is, again, the stumbling block in a failed relationship, and as Melanctha accuses Jeff of being “just too scared [...] to really feel things way down” (86), Jeff discovers that he “ain’t got no longing to be brave” (86). Melanctha’s own attempt to know her own desires does not, of course, result in heroic mastery, but rather in her destitution and death.

John Carlos Rowe cautions against reading “Melanctha” as a revision of *Q.E.D.* Such readings, he writes, tend to “mistakenly reduce *Q.E.D.* to Stein’s biographical relationship with May Brookstaver, assuming that Adele is Stein and Helen Thomas is May [...] to interpret Dr. Jeff Campbell as the latter text’s “version” of Adele in *Q.E.D.*”(230) and therefore to reduce “Melanctha” to a coded story about the special “knowledge” that comes from lesbian-feminist identity and relations” (230-231). Rowe is certainly correct to warn against autobiographical reduction. Yet effacing the continuity of character positions between *Q.E.D.* and “Melanctha,” a move which allows Rowe to take Melanctha Herbert as an emblem of Stein’s modernism, reducing Jeff to a figure of staid rationalism, produces what we might call a Hellenic reading, one that ignores the possibility of an alternate, Hebraic, legacy within the text.

When Adele presents a racial typology of herself and Helen, she understands their difference as an opposition between an heroic will and unintentional action.

‘How completely we exemplify entirely different types’ she began at last without looking at her companion. ‘You are a blooming Anglo-Saxon. You know what you want and you go and get it without spending your days and nights changing backwards and forwards from yes to no. If you want to stick a knife into a man you just naturally go and stick straight and hard. You would probably kill him but it would soon be over while I, I would have so many compunctions and considerations that I would cut up all his surface anatomy and make it a long drawn agony but unless he should bleed

to death quite by accident, I wouldn't do him any serious injury. No you are the very brave man, passionate but not emotional, capable of great sacrifice but not tender-hearted.' (224)

James writes that in the healthy will, "the normal thing is thus a sort of preliminary survey of the field and a vision of which course is best before the fiat comes. And where the will is healthy, the vision must be right (i.e., the motives must be on the whole in a normal or not too unusual relation to each other), and the action must obey the vision's lead" (*Briefer Course*, 303). Helen's "blooming Anglo-Saxon" will brings out this structure of James's will, where the decision occurs before experience, in a "theatre of simultaneous possibilities" (*Essays on Psychology*, 51). Adele, in her "compunctions and considerations" opposes the structure of Helen's will with an action that accumulates in excess of intention. For Adele, there is no space in which to form a vision and make a decision; rather, action emerges through indecision, the poor victim of Adele's will would bleed to death while Adele was still deciding whether or not to kill him.

Helen's decisiveness and Adele's indecision are figured as distinct modes of violence. In the narrative that Adele gives of Helen's will, an anonymous body is cleanly sacrificed to her decision. Adele's indecision, in contrast, results in an disorganized violence. Whereas Helen seems a professional assassin, Adele is figured as a unruly mob. Helen breaks off her relationship with Adele in a letter.

As long as I believed there was a chance of your learning to be something more than your petty complacent self, I could willingly endure everything, but now you remind me of an ignorant mob. You trample everything ruthlessly under your feet without considering whether or not you kill something precious and without being changed or influenced by what you so brutally destroy. (229)

Adele, for whom the distinction between decision and action is collapsed, is figured as "an ignorant mob." Insofar as the mob is a dangerous and violent body that must be excluded from the body politic, the mob seems to offer a figure of insurrection against the authority of the

government. Helen, as a figure of heroic will, is situated at what, for James, would be the non-psychological locus of consciousness, from the perspective of which a will is able to pass judgment on experience. Adele's indecision is the excess that this will must exclude.

When Stein revises *Q.E.D.* to "Melanctha," the positions of Adele and Helen are largely preserved in Jeff and Melanctha, but whereas in *Q.E.D.* the problem of decision and indecision, of an assimilating will and a material excess, is figured as a conflict between two distinct, and racially determined, subject positions, in "Melanctha" it becomes a problem that each subject must confront. In "Melanctha," precisely because the racial lines have grown so complicated—not only does black variously signify a broad negro sunshine, a viral power, and an apathetic carelessness towards life, but Melanctha has white blood, and both Jane and Jeff were raised in white houses—race can no longer serve as a basis for distinction.

Because Melanctha and Jeff are not only in conflict with each other, but each subject to an internal conflict, their positions are more precarious than either Adele's or Helen's. In *Q.E.D.*, Helen's accuses Adele of never having "stopped thinking long enough to feel" (214). This returns, in "Melanctha," as Melanctha's accusation that Jeff is frightened of experience. Yet, while Adele only briefly wonders if her mode of experience is inadequate before an afternoon alone, "lost completely in the tale of Dante and Beatrice," this experience serves to reassure that "there is something in my glimpse and its alright and worth while"(216), Jeff is shaken by Melanctha's accusation that there is something wrong with his perceptual habits. Likewise, while Helen's heroism is racially determined, Melanctha must work to become courageous. Stein writes that "Melanctha all her life was very keen in her sense for real experience. She knew she was not getting what she so badly wanted, but with all her break neck courage Melanctha was here a coward, and she could not learn to really understand"(68). While

Melanctha seems to gain, through Jane Harden, the “courage” to know “what everybody wanted” (75), she ultimately cannot “make her wants and what she had, agree” (62), and no courage is able to master her experience of herself as “complex with desire” (61). There is something in experience, that is, before which Melanctha, as well as Jeff, are cowardly. The failures of courage in “Melanctha” articulate a gap between knowledge and desire, and call into question the possibility of assuming a position, however briefly, where one is safe from the vicissitudes of experience. Whereas in *Q.E.D.* the relationship between a heroic will and a chaos of desire is divided between two characters, in “Melanctha” this opposition becomes internal to both Jeff and Melanctha, as a psychological, rather than purely racial, fact.

After Jane Harden introduces Melanctha to the courage to know what she wants, Melanctha tries to instill this courage in Jeff. However, in being exposed to Melanctha’s courageous knowledge of her desire, Jeff becomes anxious that she is playing a “game” (92) with him. He becomes consumed with doubt and becomes convinced that “he could know nothing,” neither what Melanctha “really wanted with him” nor “what it was he felt inside him” (110). Melanctha’s courage, rather than reduce the world to known objects, makes something unknowable flare up within Jeff. Jeff’s doubt that he could ever know either Melanctha’s or his own desire, opens him up to a new sensation—his own disgust.

Jeff felt a strong disgust inside him; not for Melanctha herself, to him, not for himself really, in him, not for what it was that everybody wanted, in them; he only had disgust because he never could know really in him, what it was he wanted, to be really right in understanding, for him, he only had disgust because he never could know really what it was really right to him to be always doing, in the things he had before believed in, the things he before had believed in for himself and for all the colored people, the living regular, and the never wanting to be always having new things, just to keep on, always being in excitements. (110)

Jeff’s problem would seem to be that he no longer knows whether it is best to live ‘regular’ or, as

Melanctha lives, 'in excitements.' And yet, in this question of choice, what is foregrounded is that Jeff is unable to assume a position from which he could choose. There is, for Jeff, no clear ethical ground upon which to base his choice, no disinterested perspective which he can assume. In choosing between excitements and regularity, Jeff fails to assume a 'courageous' position, from which he could master his desire. Jeff registers this failure as a disgust.

While Melanctha is able to remain unchanged by her relationship with Jeff, it is through her relationship with, and betrayal by, Jem that she is introduced to doubt and the failure of courage. Jem is presented as a version of what Melanctha aspires to be, as a paragon of the courage that Melanctha tries to learn from Jane Harden. As Stein writes, "Jem was more game even than Melanctha. Jem always had known what it was to have real wisdom. Jem had always all his life been understanding" (154). Yet Jem's "game" makes Melanctha "sick inside her with all her doubting" as she begins to wonder "what was it Jem really wanted to do with her"(159). Jem's knowledge and understanding is of "what everybody wanted," yet this knowledge of what everyone wants is an impossible knowledge, a reduction of the other to a known quantity which, by being known, supports the certainty of courageous knowledge. As Melanctha's "game" introduces Jeff to the experience of something inside of him that he cannot know, Jem's "game" introduces Melanctha to an experience of desire that she cannot master.

In the final pages of the novella, after Melanctha is cast off by Jem, she loses Rose, her last support.

Melanctha wanted badly to have somebody who could make her always feel a little safe inside her, and now Rose had sent her from her. Melanctha wanted Rose more than she had ever wanted all the others. Rose always was so simple, solid, decent, for her. And now Rose had cast her from her. Melanctha was lost, and all the world went whirling in a mad weary dance around her. (166)

In the "mad weary dance" of the world, Melanctha is exposed to the failure of her knowledge.

She can no longer assume a courageous position through which she can find an object that will stand up to her desire, and that will make her “a little safe.” Unable to find a new experience, a world knowledge, that will explain what she feels, Melanctha withdraws from the search for new experience and “real wisdom,” falls sick with consumption, and dies. Melanctha, in her pathetic end, and Jeff, as he is overwhelmed by disgust, would seem to be James’s “worthless ones.” And yet Stein’s figures of courageous knowledge, the heroes who can face experience without losing themselves within it, become culprits who reduce others to objects. An ethical space opens up not through heroic mastery, but in the failure of mastery.

Rowe argues that Stein derives Melanctha’s name from Phillipp Melanchthon, Martin Luther’s friend and collaborator in the Protestant Reformation. After noting the religious and revolutionary connotations of Melanctha’s name, and following from Lisa Ruddick’s reading of Melanctha’s continual “wandering” in search for new “excitements” as an affront to William James’s ethics of attention, Rowe proposes that we take Jeff’s description of Melanctha “as religion, rather than merely a devout representative of the church” as a reminder “of the Greek classical association of divinity with ‘wandering’ in the term for philosophical truth, *aletheia*, which is derived from the Greek roots, ‘*alea*’ and ‘*thea*,’ and [which] may be approximately translated as the ‘wandering divine’”(227). Because Rowe, along with, for instance, Marianne DeKoven and Michael North, associates Melanctha’s ‘wandering’ with Stein’s modernism, he must explain away Melanctha’s tragic end.

We can conclude that Melanctha Herbert is a misguided, confused, and socially or naturally determined woman, who concludes her pathetic life in a “home for poor consumptives,” where she “stayed until she died”. Or we can read her as a prophetic figure, who does for her own time and place what Phillip Melanchthon had done for sixteenth-century Saxony by coordinating religion and reason, by insisting upon a revolutionary approach to both areas of human experience, and by inspiring a mode of discourse—call it Stein’s modernism—that had an influence far beyond

either prophetic figure's powers. (239-40)

In locating Melanctha at the intersection of a Hellenism with a revolutionary Christianity—in the tradition of Pater's Marius the Epicurean—Rowe emphasizes a position of courageous experience, equating Stein with a type of Hellenism, and turns away from the possibility that something of value might persist both in Jeff's cowardice, and in Melanctha's solitary and pathetic end. Rather than ignore Jeff's "strong disgust inside him" for what "he never could know really in him"(110), and Melanctha's perplexity at the world "whirling in a mad weary dance around her"(166), in order to salvage Stein's modernism, "Melanctha" suggests that there is some value in these disgusting, pathetic, and disorganized bodies.

When Oscar Wilde offers a parody of James's ethics of mastery in *The Picture of Dorian Gray*, he stops short of proposing that the grotesque body, reveled in the final pages of the novel, is itself an aesthetic that should be valued. The novel, rather, becomes an argument, as Jeff Nunakawa suggests, for a softening of desire, for the reduction of desire into something "slight enough to be good as managed"(28). Stein, in opposing a "courageous" position to a "disgust" at the warring impulses cannot be brought under any heroic control, forces a conflict between these two positions. Like William James, Stein opposes the moralism of the heroic mind to the chaotic impulses of an instable system. Whereas James takes the side of the hero, of the saint, against the disorganized body and mind, Stein elevates the chaotic body, turning the disorganized, excessive body, into an aesthetic.

D.H. Lawrence's Subjective Science

In his two books on psychoanalysis—*Psychoanalysis and the Unconscious*, and *Fantasia of the Unconscious*—D.H. Lawrence argues that the universe is structured by a flow of sexual energy that both passes through various plexus and ganglia within the body, and relates each individual body to the material universe that surrounds it. Like Pater, Lawrence distinguishes between energy as it is known by scientific thought and governed by the mathematical signifier, and a scene where the flow of natural energy is sustained by its own internal relationships. Lawrence argues that the sin of industrial humanity is to have tried to bring this flow of energies under the control of the intellect, and that an ethical being should participate in, rather than work to understand, this natural flow.

In his critique of Freud, Lawrence argues that Freud's unconscious is a perverse intellectualization of the flow. Freud's mistake, according to Lawrence, is to have theorized the object of desire. It is because of this faulty assumption that an ideal object of satisfaction exists that Freud arrives at a theory of the Oedipal unconscious. Against the Oedipal unconscious, Lawrence proposes a theory of the "pristine unconscious," where energy is not organized around the search for an ideal object. In Lawrence's unconscious, there is only the flow of sexual energy, an endless circuit of desire. Rather than set off on the impossible task of finding the perfect object of sexual desire, Lawrence argues that the human should work to integrate him or herself into the universal flow of sexual energy, that one should participate in, rather than work to understand, the universal flow.

I. The Logic of Life

Late in *The Rainbow*, Ursula looks through a microscope, and is filled with wonder at the “the unicellular shadow that lay within the field of light” (426). It seems impossible to her that this life could be explained by a scientific discourse.

For what purpose were the incalculable physical and chemical activities nodalised in this shadowy, moving speck under her microscope? What was the will which nodalised them and created the one thing she saw? What was its intention? To be itself? Was its purpose just mechanical and limited to itself? [...] Suddenly she had passed away onto an intensely-gleaming light of knowledge. She could not understand what it all was. She only knew that it was not limited mechanical energy. (426)

Ursula’s revelation that life is beyond mechanism opens her up to a “new world” (426). She leaves the lab, “in dread of the material world” (427) to meet Anton Skrebensky, with whom she enters into an ecstatic sexual relationship. With Skrebensky “she was no mere Ursula Brangwen. She was Woman, she was the whole of Woman in the human order” (430). As “Woman” she kisses Skrebensky and is enveloped by “the soft flow...the warm fecund flow of his kiss” (432). She finds herself beyond consciousness, beyond speech, as her individual identity—as Ursula—is revealed as a mere “vessel,” that constrains a primal darkness. “It was bliss, it was the nucleolating of the fecund darkness. Once the vessel had vibrated till it was shattered, the light of consciousness gone, then the darkness reigned, and the unutterable satisfaction”(433). As Ursula and Skrebensky “put off their puppet form”(436) to participate in this dark flow, Ursula is filled with contempt for the people that she imagines surround her: “What are you, you pale citizens? [...] You subdued beast in sheep’s clothing, you primeval darkness falsified to a social mechanism”(434).

In pairing a scene of laboratory science with a scene of sexual transformation, Lawrence

suggests that just as a vital force at work in the cell cannot be reduced to mechanical energy, the truth of the human cannot be reduced to “social mechanism.” And yet while Lawrence opposes the truth of a vital flow to the fiction of scientific mechanism, Ursula nonetheless encounters the mystery of life through a microscope—an apparatus of scientific inquiry. Lawrence describes the dark flow she experiences in language borrowed from scientific discourse. When Ursula wonders at the “will which nodalised” (426) the activities in the cell, and is herself exposed to the “nucleolating of the fecund darkness”(433), Lawrence uses two quasi-scientific words, of his own coin: “nodalise” and “nucleolating.”¹³ Each of these words, in their accepted adjectival sense, refers to a unified body that is divided into parts. A “nodal point” designates “a center of convergence or divergence,” or “a joint or point of branching of the stalk of a crinoid or other invertebrate animal”(OED), and it seems clear that Lawrence uses “to nodalise” in reference to the various discrete processes at work in the cell body. By making the adjective “nodal” into a verb, Lawrence raises the question of the grammatical subject—the will—responsible for producing and maintaining these nodes in the development of the cell. Likewise, while “nucleolated” refers to something that has a nucleolus, a “nucleolating” force is that which produces nuclei. At a grammatical level, then, Lawrence's vitalism ascribes a subject to scientific discourse. Ursula's attention to the unicellular organism orients her toward the grammatical subject of science. As she wonders at the “will which nodalises” the processes of the cell, her position remains that of the amazed spectator. However, when she is taken up in the dark flow that moves through Skrebensky's kiss, she is no longer a spectator, but herself subjected to this “nucleolating” force that allows her to take up her true position as “Woman” in the “human order” (430).

¹³ The OED cites *Women in Love* as the first use of the verb “to nodalise.” According to the OED, the adjective “nucleolated” does not exist as a verb.

Ursula's experience of this unconscious flow delivers, in part, on the genetic promise of the Brangwen Family. Lawrence writes in the opening lines of *The Rainbow* that "There was a look in the eyes of the Brangwens as if they were expecting something unknown, about which they were eager" (1). As a promise of what the novel will approach, this "unknown" has a doubled signification. It is not merely the constantly receding temporal horizon towards which the action of the novel proceeds, but also a mode of experience that is unknowable and necessarily inarticulable, an "unutterable satisfaction" beyond the "light of consciousness," where "another activity" begins. As Lawrence writes of Tom Brangwen's first sexual encounter,

A daze had come over his mind, he had another centre of consciousness. In his breast, or in his bowels, somewhere in his body, there had started another activity. It was as if a strong light were burning there, and he was blind within it, unable to know anything, except that this transfiguration burned between him and her, connecting them, like a secret power. (33)

This "unknown" is not contingently, but rather constitutively excluded from Tom's intellectual comprehension, and much of the action of the novel consists in its protagonists' work to negotiate this unknown. When, later in the novel, Tom returns to the Marsh after visiting his brother, and is confronted with the normalcy of his life, "he realized how fixed everything was, how the other form of life was beyond him, and he regretted for the first time that he had succeeded to the farm. He felt a prisoner, sitting safe and easy and unadventurous" (86). This failure to live up to the revelation of an unknown, "secret power" becomes a kind of death sentence: when Tom is caught, drunk, in a flood, Lawrence's language suggests that he is drowned by the same dark unconscious flow that constitutes a sexual union. "[I]n utter darkness, the unconscious, drowning body was rolled along, the waters pouring, washing, filling in the place. The cattle work up and rose to their feet, the dog began to yelp. And the unconscious, drowning body was washed along in the black, swirling darkness, passively" (244). Just as Tom

is “blind within” the primeval flow of ecstatic revelation, it is the darkness of the flowing waters that render him unconscious at his death.

That we understand the “darkness” of the “pouring” waters that render Tom unconscious as the fatal return of an unrecognized “flow” to which he is “blind” in his first sexual encounter, is suggested both by the rhetorical identity of the destructive inhuman forces in the two scenes and by Lawrence's juxtaposition of Tom's failure with two evocations of the philosophical category of “the Unknown.” Tom's realization that there is an “other form of life” that is passing him by comes after he finds that his brother “has been reading Herbert Spencer” (86); later in the novel, just before Tom drowns, this other form of life is again related to the reading of “the Agnostic writings” (238). The term shared by Spencer and the Agnostics, and which suggests that for Lawrence there is a technical term in play, is the philosophical category of the “Unknowable.”

As I have argued above, for Spencer, the “Unknowable” comes from William Hamilton and H.L. Mansel, in whose work it emerges as the product of a quasi-Kantian limitation of human intellect, such that the field of the “Unknown” is posited beyond the field of phenomenal perception and intellectual activity. By positing the “Unknown” as an “Absolute,” thought reminds itself that it cannot overstep its bounds by granting either a positive or negative content (as they accuse the dogmatic Kantians of doing) to this beyond of perception as it is conditioned by the laws of thought. As Spencer writes, we must posit “the continued existence of an Unknowable as the necessary of the Knowable” (Spencer, 154-5).

Whereas for Pater, as I have suggested, the “Unknowable,” as “that plenary substance of which there is only one phase or facet in what is there expressed”(17), is only suggested at by the presence of “soul” in literature, for the agnostics and scientific naturalists who appealed to

Spencer, the “Unknowable Absolute” becomes deified. As Bernard Lightman writes, in his study of the origins of agnosticism, “Huxley talked of the unknowable behind nature in tones of awe and reverence” (136). Lightman continues that in Frederick James Gould's popular pamphlet, *Stepping-Stones to Agnosticism*, published in 1890, “the description of agnosticism was unashamedly Spencerian. Belief in a God was laid down as an agnostic principle on the basis that Spencer’s ‘doctrine of the Unknowable is assented to by so many professed Agnostics’” (142). While Huxley distanced himself from this explicit deification of the “Unknowable” Lightman argues that the “Unknowable” continued to be figured as a support for and guarantee of scientific knowledge. As Lightman writes, “a law of nature as formulated according to the present state of scientific progress may be a product of human thought, however, the agnostics faithfully believed that embedded in nature there were laws that grounded the natural order”(Lightman, 176). Spencer's “Unknown” thus became identified with a naturalized “deity of agnosticism” that “was virtually synonymous with the laws of the natural order” (Lightman, 153). In evoking Spencer and the agnostics as signifiers for the “unknown” that Tom refuses to venture into, Lawrence situates the novel with respect to this tradition of thought.

Whereas in Tom's failed relationship to the unknown, the unknown remains, as for Spencer and the Agnostics, an unknowable absolute, the scientific language through which Ursula encounters this unknown force suggests that unknown has a logic, into which the human can enter. By using the same language to describe the processes at work in a cell, and a mode of ecstatic sexual relation, Lawrence suggests that the human can express the logic of the material world, just because the human is part of the material world. Lawrence thus repeats the kind of move that Henri Bergson—with whom he was familiar—makes in the opening pages of *Creative Evolution*, as he criticizes Spencer for failing to enter into the logic of the “Unknown,” and thus

of excluding a true study life from the domain of philosophy. Quoting Spencer's declaration that "the absolute is not in our province; we are brought to stand before the Unknowable" (Bergson, xxi), Bergson argues that "for the human intellect, after too much pride, this is really an excess of humility" (Bergson, xxi).

If the intellectual form of the living being has been gradually modeled on the reciprocal actions and reactions of certain bodies and their material environment, how should it not reveal to us something of the very essence of which these bodies are made? Action cannot move in the unreal [...]. Intellectual activity, in so far as it relates to a certain aspect of inert matter, ought, on the contrary, to give us a faithful imprint of it, having been stereotyped on this particular object. (Bergson, xxi)

Since the forces that compose Spencer's category of the "Unknowable" situate the body Bergson argues that intellectual activity, itself dependent upon the logic of the matter that is its material support, must carry within it the logic of these forms. While Lawrence's preoccupations are not the same as Bergson's, both open a field of thought by declaring that since the human, with its intellect, is part of the material world, the truths of the material world can be revealed through a mode of intellectual activity. Lawrence, like Bergson, does not understand the "Unknown" as the beyond of thought. Rather, in the preface to his *Fantasia of the Unconscious*, he suggests that thought itself should be divided: since "objective science of modern knowledge concerns itself only with phenomena, and with phenomena as regarded in their cause-and-effect relationship," and "even biology never considers life, but only mechanistic functioning and apparatus of life," it is necessary to articulate a "subjective science," that will enter into a "great field of science which is as yet quite closed to us"(62). In other words, Lawrence at once preserves and modifies the distinction between the philosophical and scientific world and the "unknown" that lies beyond it. Rather than define thought as allied with science, as for Spencer and the agnostics, where the "Unknowable" is the unconditioned exterior that guarantees the stability of the natural

world, Lawrence takes the field of thought as itself divided into the field of mechanical knowledge—the field of “knowing”—and that of a vital force that can be expressed through the program of a “subjective science.”

In articulating a subjective science that is linked to a transformative sexual flow, Lawrence appeals to the tension between a position that locates life, beyond science, as an unknowable universal cause, and a position that finds life in the flowing transfers of energy described by thermodynamics. Lawrence at once identifies a mode of qualitative feminine experience—in which Ursula becomes “the whole of Woman in the human order” (430)—as the beyond of scientific thought, and proposes that this field can be entered into through the language of thermodynamics. Rather than refuse scientific discourse in favor of a unified vital scene, Lawrence suggests that the scene of scientific discourse itself can be appropriated such that rather than exclude the subject, it reveals the as yet hidden depths of human subjectivity.

While for a mechanical energetics, the flow of energy and transformation of bodies is governed by the laws of thermodynamics, for Lawrence the flow of energy is lawless. In his *Fantasia of the Unconscious*, Lawrence offers the following brief analysis of Einstein's theory of relativity:

As far as I can see, Relativity means, for the common amateur mind, that there is no one single absolute central principle governing the world. The great cosmic forces or mechanical principles can only be known in their relation to one another, and can only exist in their relation to one another. But, says Einstein, this relation between the mechanical forces is constant, and may be expressed by a mathematical formula: which mathematical formula may be used to equate all mechanical forces of the universe [...]. What I doubt is the equation formula. It seems to me, also, that the velocity of light through space is the deus ex machina in Einstein's physics. Somebody will put salt on the tail of light as it travels through space, and then its simple velocity will split up into something complex, and the Relativity formula will fall to bits. (190)

Lawrence does not mistrust the notion of a hidden ontology that resides in the movements of

forces, but rather the idea that there is a law, articulated in mathematical language, and invented by the intellect, which governs the purely imminent relationships between these forces.

Lawrence offers that the universe is purely relational and in no need of a transcendental term—the equation formula—that will organize these forces.

In these terms, Lawrence repeats a version of the distinction that Pater draws between two scenes of transformative energies. Where Pater distinguishes between the thermodynamic heat death of the universe, proceeding towards equilibrium, governed by a mathematical equation, that, as Sebastian von Stork offers, has “zero is equal to zero for its result” (*Imaginary Portraits*, 120) and an immanent “antiphonal rhythm, or logic [...] proceeding uniformly from movement to movement, as in some intricate musical theme” (*Plato*, 17), Lawrence distinguishes between a theory of force where forces are equated by a mathematical formula, and a theory where forces operate according to their own immanent logic. Whereas Pater theorizes this scene of immanent forces, of primary nature, as the scene of qualitative and subjective experience that can be inscribed within the objective and technical material of artistic discourse, and in my reading of Wilde's *The Picture of Dorian Gray* and Stein's “Melanctha,” the disgusting human body becomes, itself, an aesthetic object, Lawrence will argue that an understanding of the logic of primary nature, and an overcoming of disgust and shame, will turn this scene of disgust into an erotics of nature.

Lawrence's most detailed exploration of the logic of primary nature comes in his two book-length essays on psychoanalysis. In these far-ranging essays, Lawrence opposes the structure of what he calls the “vital unconscious” to the law-governed field of Freud's oedipal unconscious. Lawrence argues that in Freud's Oedipal unconscious, the material of the unconscious is interpreted through a series of laws that are themselves foreign to the

unconscious. Freud's law-governed unconscious thus falsifies the field of Lawrence's vital unconscious. Lawrence's essays on psychoanalysis and the unconscious argue that the structure of the vital unconscious is equally the structure of the material world. The essays thus present a sometimes wildly speculative biology, in which physical and psychical reality are joined in the logic of a primary nature that is neither feminine, nor masculine, but rather sustained by a universal bisexual energy.

For Lawrence, the logic of the material world must begin with the subject. Inverting the Gospel of John, Lawrence begins not with the "Word"—a transcendental mark that establishes the material world—but with the "life pulse" of a "living creature":

In the beginning was a living creature, its plasm quivering and its life-pulse throbbing. This little creature died, as little creatures always do. But not before it had had young ones. When the daddy creature died, it fell to pieces. And that was the beginning of the cosmos. Its little body fell down to a speck of dust, which the young ones clung to because they must cling to something. Its little breath flew asunder, the hotness and brightness of the little beast—I beg your pardon, I mean the radiant energy from the corpse flew away to the right hand, and seemed to shine warm in the air, while the clammy energy from the body flew away to the left hand, and seemed dark and cold. And so, the first little master was dead and done for, and instead of his little living body there was a speck of dust in the middle, which became the earth, and on the right hand was a brightness which became the sun, rampaging with all the energy that had come out of the dead little master, and on the left hand a darkness which felt like an unrisen moon. (*FU*, 69)

The flippant tone and light derision through which Lawrence speaks of the "daddy creature" and "little master" serves to ridicule both paternal mastery, and the very idea of an origin. Not only is the inaugural act in Lawrence's universe the death of the organism, rather than a regal act of creation *ex nihilo*, but while the cosmos was created by the death of the "daddy creature," the "daddy creature's" life is itself dependent on the forces that its death inaugurates. Lawrence's origin tale can thus only be presented as the subversion of an origin tale. Since the circuit

between life and death is internal to life, “there never was any beginning” (*FU*, 69). The “life-pulse” that is liberated at death of the organism is both previous to, and in excess of, the “daddy creature.” And yet Lawrence argues that we must begin with an individual creature, rather than with the flow of the life pulse embodied in this creature, so that the life force itself does not take on a transcendental character.

Out of living creatures the material cosmos was made: out of the death of living creatures, when their little living bodies fell dead and fell asunder into all sorts of matter and forces and energies, sun, moons, stars and worlds. So you got the universe. Where you got the living creature from, that first one, don't ask me. He was just there. But he was a little person with a soul of his own. He wasn't Life with a capital L. (*FU*, 70)

At the beginning is the living creature, but this living creature's life depends upon the “life pulse” that moves through it. The “life pulse,” in turn, depends upon the existence of living creatures. There can be no beginning because the logic of life, of primary nature, does not follow rules or laws. Nature exists only in relation to itself. It has no outside, no beginning, and no end.

While Lawrence's story about the origin of the universe stays at a certain level of metaphysical abstraction, when he moves to consider the embryonic development of the organism, his logic takes on a hallucinatory specificity. As the cosmos begins with the division of the first creature into matter and energy, life begins with the first division of the egg, which establishes the “great division” of life and nature.

So, in the first division of the egg-cell is set up the first plane of psychic and physical life, remaining radically the same throughout the whole existence of the individual. The two original nuclei of the egg-cell remain the same two original nuclei within the corpus of the adult individual. Their psychic and their physical dynamic is the same in the solar plexus and lumbar ganglion as in the two nuclei of the egg-cell. The first great division in the egg remains always the same, the unchanging great division in the psychic and the physical structure; the unchanging great division in knowledge and function. It is a division into polarized duality, psychical and physical, of the human being. It is the great vertical division of the egg-cell, and of the nature of man. (*FU*, 81)

This “great vertical division,” beginning with the first division of the egg-cell, is preserved in the formed organism as the division between what Lawrence calls the two central nerve centers of the body—the embodied brains of the solar plexus and lumbar ganglion. While “the solar plexus is the center of all the sympathetic system” (*FU*, 80) the center of attraction that proclaims that “I am I, the vital center of all things” (*FU*, 80) the lumbar ganglion is center of repulsion that proclaims that “I am I, in distinction from a whole universe, which is not as I am” (*FU*, 80). The solar plexus has to do with incorporation and “controls the great intake of love and of milk, of psychic and of psychical nourishment” (*FU*, 81), and the lumbar ganglion has to do with excrement, with the process by which “the milk is urged away down the infant bowels, urged away towards excretion” (*FU*, 81) In these two centers “the motion is the same” but the “vital relation” (*FU*, 81) is different. The same force moves through these two centers of the human; the difference between these centers—and the division within the human—can be known only through the relationship between them.

This vertical division reappears as the detailed structure of the universe:

Light and dark, these great wonders, are relative to us alone. These are two vast poles of the cosmic energy and of material existence. These are the vast poles of cosmic sympathy, which we call the sun, and the other white pole of cosmic volition, which we call the moon. To the sun belong the great forces of heat and radiant energy, to the moon belong the great forces of magnetism and electricity, radium-energy, and so on. The sun is not, in any sense, a material body. It is an invariable intense pole of cosmic energy, and what we see are the particles of our terrestrial decomposition flying thither and returning, as fine grains of iron would fly to an intense magnet, or better, as the draught in a room veers towards the fire, attracted infallibly, as a moth towards a candle. The moth is drawn to the candle as the draught is drawn to the fire, in the absolute spell of the material polarity of fire. And air escapes again, hot and different, from the fire. So is the sun. (*FU*, 172)

Not only do celestial objects—the sun and moon—exist as collections of forces, but these

collections of forces are themselves “poles of cosmic sympathy.” While magnetism and electricity are lunar forces, and heat and radiant energy are solar forces, the opposition of the sun and moon as “vast poles of cosmic sympathy,” suggests that this opposition is, itself, understood on the model of an electrical circuit. The universe itself becomes an electrical circuit. The material existence of individual body exists as a moment in this universal flow, and the universal flow is, itself, nothing but the relationship between these poles of “cosmic sympathy.”

Lawrence’s theory of sexual difference is established on the model of this universal electrical circuit. While “man is polarized upwards, towards the sun and the day,” “woman is really polarized downwards, towards the center of the earth. Her deep positivity is in the downward flow, the moon pull” (*FU*, 196). A sexual relationship comes when these two poles are brought into relation.

From the powerful dynamic center the female sends out her dark summons, the intense dark vibration of sex. And according to her nature, she receives her responses from the males. The male enters the magnetic field of the female. He vibrates helplessly in response. There is established at once a dynamic circuit, more or less powerful. It would seem as if, while ever life remains free and wild and independent, the sex-circuit, while it lasts, is omnipotent. There is one electric flow which encompasses one male and one female, or one male and one particular group of females all polarized in the same key of vibration. (*FU*, 194)

Sexual difference is as real, and as illusory, as the poles of an electrical circuit. It does not exist apart from this polarizing circuit, and the circuit cannot exist without the poles. Each sex, like the sun and the moon, is an “invariable intense pole of cosmic energy”; together, they form a bisexual “dynamic circuit.” Lawrence’s subjective science begins with the subject, as the death of a “little creature” liberates the material out of which the cosmos is made, and leads to the subjective experience of an ontologically grounded sexual encounter. Lawrence claims that not only does the subjective experience of an “omnipotent” “sex-circuit” reveal the structure of the

universe, but also that the material structure of the universe, itself, is derived from the life and death of the first creature.

As Anne Fernald notes, the speculative biology of Lawrence's essays on the unconscious “was almost universally panned” in contemporary reviews, and has “been largely ignored by critics and readers since” (184). Indeed, Lawrence begins the preface of *Fantasia of the Unconscious* by offering an apologia for the first volume, *Psychoanalysis and the Unconscious*. He has been ridiculed, he writes, as a “babbling mystic” (54), as “half-baked” (53) author of an “aimless book” (53) that makes the bizarre claim that the “the soul is in the solar plexus” (53). In answering this criticism, Lawrence insists that he is “not a proper archaeologist nor an anthropologist nor an ethnologist” nor is he a “‘scholar’ of any sort” (62), but rather an “amateur of amateurs” (62). Nevertheless, through his “half-baked” theory of the bisexual electro-magnetic flow as the reality that is both revealed by, and productive of, sexual difference, Lawrence appeals to a rich tradition of thought that theorizes sexual difference on the model of an electrical current.

Commenting on Lawrence's novels, Tim Armstrong writes that “Lawrence’s use of electrical metaphors suggests their easy applicability to sexual desire: electricity and magnetism are, as heterosexual desire is said to be, bipolar. It is even possible to suggest that gender is bipolar on the model of electricity and magnetism” (19). Lawrence’s theorization of desire and gender on the model of electricity and magnetism both traces the trajectory of, and intervenes in, what Thomas Lacquer calls the “epistemological divide” that “separates ancient and modern understandings of sexual difference itself”(142). According to Lacquer, over the course of the eighteenth century, “the ‘one-sex’ model of antiquity, in which women were viewed as ‘lesser’ men, gave way to a ‘two-sex’ model, in which ‘male’ and ‘female’ were seen instead as radically

distinct”(142). When Sam Halliday relates this epistemological divide to contemporaneous developments in electrical science, he notes that the “‘one fluid’ theory of Franklin was confronted by the ‘two fluid’ theories of Charles François de Cisternay Dufay (1698-1739) and his successors,” where “‘positive’ and ‘negative’ were seen not as aspects of a single substance, but two entirely different things” (142). In other words, it is de Cisternay Dufay's quickly outdated model of electricity, where positive and negative correspond to two different substances, that most closely resembles the “modern” notion of sexuality, where male and female are radically distinct. Franklin's “one fluid” theory, extended to a model of sexual difference, would seem to hold that the single substance that has the potential to be either positively or negatively polarized is bisexual.

In grounding his theory of sexual difference in the flow of sexual energy, Lawrence evokes a roughly contemporary theorization of a bisexual flow that would have come to him from Edward Carpenter, Otto Weininger, and indirectly from Wilhelm Fliess. Émile Delavenay proposes that Lawrence was familiar with Weininger's *Sex and Character*.¹⁴ Indeed, Lawrence's writings on a bisexual circuit composed of feminine and masculine elements bear a striking resemblance to Weininger's own theorization of sexuality. For Weininger, sexual difference emerges through the flux between two ideal (and non-existent) types, of “Man” and “Woman.” “It is always a complete Man (M) and a complete Woman (W) who strive to join in sexual union, although they are distributed in different proportions between the two different individuals in

¹⁴□ The only explicit mention Lawrence makes to Weininger is a brief aside in his review of *Fallen Leaves*, by V. V. Rozanov, where he writes of Rozanov's “strange and self-revealing statements concerning Weininger” (*Phoenix*, 392). Otherwise, as Delavenay has argued, Lawrence was well acquainted with Edward Carpenter's *The Intermediate Sex*, which draws, and quotes, heavily from *Sex and Character*. Delavenay argues in “Lawrence, Weininger, and ‘Rather Raw Philosophy,’” for the many structural similarities between Lawrence and Weininger, as well offering some speculation about Lawrence's veiled references to Weininger.

every case” (29). Weininger writes that “All human beings oscillate between the Man and the Woman in them,” and continues that “these oscillations of the sexual characteristics can be divined, like the oscillations of the earth’s magnetism, into regular and irregular ones” all of which obey “laws of periodicity” (48). For Weininger, as for Lawrence, “Man” and “Woman” are two poles within a bisexual field. But for Lawrence, the oscillation is not internal to a single male or female subject. As Lawrence writes, against Weininger’s idea of bisexuality as presented in Carpenter’s *The Indeterminate Sex*, “every single cell in every male child is male, and every cell in every female child is female. The talk about a third sex, or about the indeterminate sex, is just to pervert the issue” (FU, 126).

For Weininger, and Carpenter, the sexual flow makes a double appearance in human subjectivity. First, there is the polarized flow of sexual energy within each human being. Second, there is the complementary sexual relationship between the two human beings, such that in an ideal relationship the proportional masculine and feminine characteristics add up to one man, and one woman. For Lawrence, as for Weininger and Carpenter, there is a flow of polarized sexual energy (between the solar plexus and lumbar ganglion) that is internal to the individual human body. Lawrence insists, however, that this current is a “single force,” that polarizes the man and woman differently, such each individual is all “man,” or all “woman”: “Biologically, it is true, the rudimentary formation of both sexes is found in every individual. That doesn’t mean that every individual is a bit of both, or either, ad lib” (FU, 126). The idea that a man or a woman could have a mixture of masculine and feminine energy is, for Lawrence, a fantasy of modern society. The problem, for Lawrence, is a Christian ideal that “has taught us to be gentle and wistful: rather girlish and yielding, and very yielding in our sympathies. In fact, many young men feel so very like what they imagine a girl must feel, that hence they draw the conclusion that

they must have a large share of female sex inside them. False conclusion” (*FU*, 126-7).

These girlish men have often, to-day, the finest maleness, once it is put to the test. How is it then that they feel, and look, so girlish? It is largely a question of the direction of the polarized flow. Our ideal has taught us to be so loving and so submissive and so yielding in our sympathy, that the mode has become automatic in many men. Now in what we will call the "natural" mode, man has his positivity in the volitional centers, and women in the sympathetic. In fulfilling the Christian love ideal, however, men have reversed this. Man has assumed the gentle, all-sympathetic rôle, and woman has become the energetic party, with the authority in her hands. The male is the sensitive, sympathetic nature, the woman the active, effective, authoritative. So that the male acts as the passive, or recipient pole of attraction, the female as the active, positive, exertive pole, in human relations. Which is a reversal of the old flow. The woman is now the initiator, man the responder. They seem to play each other's parts. But man is purely male, playing woman's part, and woman is purely female, however manly. The gulf between Heliogabalus, or the most womanly man on earth, and the most manly woman, is just the same as ever: just the same old gulf between the sexes. The man is male, the woman is female. Only they are playing one another's parts, as they must at certain periods. (*FU*, 127)

It is important to note that Lawrence's tirade against womanly men and manly women is not directed against the logic of a fundamental bisexuality. Rather, he distinguishes between an electro-magnetic sexual force and the elements it polarizes. Lawrence argues that the Christian ideal, which has made men aspire to have a “sensitive, sympathetic nature,” makes men play the role of women. Because this is merely role-playing, the male and female positions remain, as always, determined by a polarizing force. From Lawrence's perspective, Weininger and Carpenter are right to find a bisexual force at the heart of sexual difference. He refuses, however, the idea that this bisexual force is internal to the single human subject: there cannot be a feminine moment in the male position, or a masculine moment in the female position, because each sex is polarized differently by flow of bisexual energy.

Weininger's theory of bisexual and periodic flows of sexual energy derives much of its force from Wilhelm Fliess's 1897 study, *The Relation Between the Nose and the Female Sex*

Organs, Presented in their Biological Significance. Fliess's study was important to the early Freud, and Lawrence's proximity to Fliess will help clarify Lawrence's critique of Freud. As Paul Roazen writes, the publication of *Sex and Character* furthered a rift between Fliess and Freud, as Fliess accused Freud of leaking, through Freud's patient and Weininger's friend Hermann Swoboda, Fliess's ideas of sexual periodicity and bisexuality to Weininger.

Freud discussed Fliess's pet idea on the multiple roles of bisexuality inhuman life (for instance, how feminine men attract masculine women and vice versa) with a patient in treatment. The patient, Herman Swoboda, then communicated the thought to his friend Otto Weininger, who, as Freud put it, 'thereupon struck his forehead and ran home to write down his book.' Weininger's book was an immense success, and Fliess interrupted the lapse in his correspondence with Freud and demanded to know how this 'burglary' of his ideas had taken place. (93)

Fliess's own wildly speculative study moves from the visual resemblance between the structure of bone and tissue in the nose and female genitalia, to the seemingly functional—in that each involves a spontaneous flow of blood—resemblance between a nosebleed and a menstrual period to, a universal theory of a bisexual flow that periodically traverses the human body. Through an impressive series of tables that chart the dates of important incidents in patients' lives, recording everything from menstrual flows and nosebleeds to migraines, anxiety attacks, births, and deaths, Fliess argues that these phenomena are the expression of periodic flows of a universal sexual substance. These flows occur in two periods, and Fliess, as he writes, has “named the series of twenty eight days 'feminine' and the series of twenty three days 'masculine'”.¹⁵ Anxiety “is produced at periodic days” if these flows are not allowed expression.

Aligning his theory with Freud's early idea of repression, Fliess writes that anxiety occurs only when this flow is repressed.

¹⁵ Fliess's study is unfortunately not translated into English. The translations are my own, from the French translation of Fliess's German. “Nous avons sans rien préjuger, nommé féminines les séries de vingt-huit jours et masculines les séries de vingt-trois jours”(254)

The sexually mature man, who is able to entirely satisfy his reproductive instinct, does not experience anxiety. The excitation finds its normal expression, and through this expression its balance. But in the circumstances defined by Freud, if this balance is imperfect, a part of this unspent substance accumulates and resurges, transformed into anxiety. It is a little like electrical force that, when resistance is opposed, accumulates and then finds its balance in periodic discharges that produce effects like light and heat, or even motor effects that would not have appeared if the current had not been restricted. (238)¹⁶

Fliess's cure for a wide range of emotional as well as physical problems is thus to bring the patient into rhythm with these universal flows, by applying cocaine to the mucous membrane of the nose. Fliess—unlike Weininger, Carpenter, or Lawrence—does not argue that each human being is sexualized by these two periodic pulsations of sexual energy. Rather, he argues that each human's life is determined by the periodic expressions of this force. However, like Lawrence, Fliess argues that the fundamental reality of human life is determined by this flow of energy.

Serge André writes that even more astonishing than the speculative fervor of Fliess's theory is that "Freud, who in early 1896 was the first reader of this manuscript, had virtually no objections to this 'nose-genital,' as he called it. On the contrary, he sang its praises, extolling its brilliance and originality and finding nothing to amend" (29). Indeed, Freud's *Project for a Scientific Psychology*, which was first envisioned as a joint project between Freud and Fliess, understands human experience as the expression of a flow. Freud's starting point in the *Project* is a theory of "neuronic excitation as quantities in a condition of flow" (356). This "flow" results from the principle of "neuronic inertia, which asserts that neurons tend to divest themselves of

¹⁶ "L'homme sexuellement mûr, que est en mesure de satisfaire entièrement à l'instinct de reproduction, n'a pas d'angoisse. L'excitation trouve son expression normale et par là son équilibre. Mais dans les conditions définies par Freud, si l'équilibre est imparfait, une partie de la substance non dépensée s'accumule et finit par resurgir sous la forme transformée de l'angoisse. Un peu comme la force électrique qui, lorsqu'une grande résistance lui est opposée, s'accumule et s'équilibre en décharges périodiques produisant des effets tels que la lumière et la chaleur, ou encore des effets moteurs que n'apparaîtraient pas si le courant n'était pas entravé"(238).

quantity” (356). A simple organism that reacts to stimulus takes energy in from the environment—through sensory neurons—and expels it through motor neurons. The case changes slightly for complex organisms such as humans. “As the internal complexity of the organism increases, the neuron system receives stimuli from the somatic element itself—endogenous stimuli, which cause equally for discharge” (357). To satisfy these endogenous stimuli—such as “hunger, respiration and sexuality” (357)—the organism must “learn to tolerate a store of quantity [...] sufficient to meet the demands for specific action” (358). While some tension must be reserved within the “neuron system,” the system still works “to keep its level of tension constant” (358). Hysterical or neurotic symptoms come when an excess of energy is stored and is unable to release its energy back into the environment. The problem of cathexis thus has to do with finding a way to release this reserve of energy and to thus reintegrate the energy that is stored up in the symptom into the flow of energy that passes into and out of the subject. Just as Fliess’s cocaine treatments allow the patient to express the periodic flow that traverses his body, for the early Freud, cathexis allows the patient to reintegrate the excess energy that is stored in the symptom back into the environment.

Yet there is an important difference between Fliess and the early Freud. Fliess is invested in revealing the bisexual pulsations of energy that move through the universe, and that affect the human according to definite periods. For Fliess, to use a psychoanalytic terminology, the unconscious is the scene of this bisexual pulsation, and the cure consists in bring the human into harmony with this scene. For Freud, in contrast, the unconscious only emerges in symptom. While for Fliess the importance of a symptom is that it reveals the ontological flow of sexual energy, Freud translates the symptom into conscious thought. Freud is interested in this flow of energy as a support for the technique of psychoanalysis, while Fliess's interest is in revealing a

speculative metaphysics.

In arguing for a link between a bisexual and universal electro-magnetic force and the structure of the unconscious, Lawrence thus returns to the originary ground of psychoanalysis. If Freud works to translate the symptom into conscious thought, while Fliess uses symptom to reveal an ontological truth, then Lawrence's critique of Freud might be seen as a return to the question of the relative emphasis that Freud and Fliess place on the symptom. Rather than understand the unconscious as that which is revealed when the symptom is translated into conscious thought, Lawrence understands this flow of energy, itself, as the unconscious.

Lawrence's critique of psychoanalysis begins with what he sees as its practical failure. As Lawrence writes, "the analyst promised us that the tangle of complexes would be unraveled, the obsessions would evaporate, the monstrosities would dissolve, sublimate, when brought into the light of day" (*PU*, 9). Yet if neurosis is caused by the repressed Oedipal complex, then all psychoanalysis can offer is that "[a]ny inhibition must be wrong, since inevitably in the end it causes neurosis and insanity. Therefore the inhibition of incest-craving is wrong, and this wrong is the cause of practically all modern neurosis and insanity" (*PU*, 10-11). If we are to accept the unconscious as an important element of human life, and if "incest-craving...actually exists and refuses to give way before any criticism" then we have no option "but to accept it as part of the normal sex-manifestation" (*PU*, 11).

Lawrence's solution to this impasse—for he argues that "incest craving" is, indeed, a "monstrosity"—is to argue that the Oedipal complex "is not caused by the inhibition of some so-called normal sex-impulse" (7). Rather, "when the analyst discovers the incest motive in the unconscious...he is only discovering humanity's repressed idea of sex" (*PU*, 11). The "incest motive" does not exist in what Lawrence calls the "pristine unconscious," but rather is "a logical

extension of the existent idea of sex and love” that is transferred by the mind into the “affective-passional psyche” (*PU*, 12). The Oedipal fantasy arises when the mind tries to theorize the object that would satisfy desire and put an end to this indestructible flow of desire. The perfect object—the sexualized mother—exists only as an ideal of perfection that is invented as a solution to the reality of this unceasing flow of energy. While for the early Freud the Oedipal object is the limit to desire, for Lawrence the drive is an objectless and unceasing flow of sexual energy. Accordingly, the real unconscious cannot be approached through an ideal of satisfaction, but only through a participation in this flow of sexual energy. Rather than accept this Oedipalized ideal of the unconscious, Lawrence proposes that “we must go from centre to centre, chakra to chakra, to use an old esoteric word”(*PU* 35) in order to establish “the first field of the unconscious”(*PU*, 35). The “true, pristine, unconscious, in which all our genuine impulses arise [...] is the well head, the fountain of real motivity” (*PU*, 12), while the Freudian unconscious is “spawn produced by secondary propagation from mental consciousness” (*PU*, 12). The true unconscious—as a scene of relative forces moving within and through bodies, is a kind of primary nature, itself falsified by the rules that govern the secondary nature produced in Freud's scientific discourse.

Serge André argues that while it is Freud's break with Fliess over the question of the relationship of the human to this flow of sexualized energy that allows Freud to found psychoanalysis, Freud's most promising students—among them Jung and Ferenczi—were convinced by the logic of Fliess's bisexual flow. While Lawrence evokes Jung's libido as a description of the flow of unconscious energy, Ferenczi's “mutual analysis” is perhaps closer to Lawrence's position. Ferenczi argues that when the analyst and analysand analyze each other in the course of a psychoanalytic session, an energy is liberated that flows between the two. For

Ferenczi, psychic energy is a “semisubstance” that has the “extraordinarily or wonderfully pleasing quality of being both body and mind simultaneously, that is, of expressing wishes, sensations of pleasure-unpleasure, or even complicated thoughts, through chances in their structure or function (the language of organs)”(7). This “semisubstance,” that speaks through a “language of organs” can be liberated in the process of “mutual analysis,” where the libido forms a circuit between the analyst and analysand, a “libido-solution” that functions “both as a glue and as a healing substance”(13). As Ferenczi writes, it is important that “this mutual flux be taken in the substantial sense and not merely explained in terms of psychology” (12). This real, material energy, when liberated, allows that “the two unconsciousnesses thereby receive mutual help” (12). As in Lawrence's notion of the ontological fact of subjects united in a flow of energy, for Ferenczi, a flow of libido-energy forges a circuit between the two subjects. Lawrence refuses a language of the intellect for just this “language of the organs,” the play of forces between the solar plexus and lumbar ganglion.

For Freud, the impossibility of satisfaction that emerges from the discovery of the Oedipal unconscious implies an ethic. If the truth of desire is Oedipal desire, then participation in the social world demands the sacrifice of this desire. As he writes in *The Psychopathology of Everyday Life*, “a large part of the mythological view of the world, which extends a long way into most modern religions, is nothing but psychology projected into the external world [...] One could venture to explain in this way the myths of paradise and the fall of man, of God, of good and evil, of immortality, and so on, and to transform metaphysics into metapsychology” (SE 6:256). Freud thus understands the ethos of psychoanalysis as the decoding of metaphysics into metapsychology. In his 1927 essay “The Question of a *Weltanschauung*,” Freud defines a *Weltanschauung* as “an intellectual construction which solves all the problems of our existence

on the basis of one overriding hypothesis” (195), and proposes that psychoanalysis “is quite unfit to construct a *Weltanschauung* of its own: it must accept the scientific one” (196). And yet, as he continues, “the *Weltanschauung* of science already departs noticeably from our definition,” for while science “assumes the uniformity of the explanation of the universe[...]it does so only as a programme, the fulfillment of which is relegated to the future” (196). What science asserts as a “programme” is “that there are no sources of knowledge of the universe other than the intellectual working-over of carefully scrutinized observations—in other words, what we call research—and alongside of it no knowledge derived from revelation, intuition or divination”(196). The ethics of the *Weltanschauung* of science, as part of a psychoanalytic labor, thus involves a critique of any non-scientific *Weltanschauung*, and the imposition of “a dictatorship of reason” (198) in its place. In terms of a psychoanalytic ethos, this involves the translation of the language of organs—the full range of hysterical symptoms—into rational discourse, which allows the patient to confront the impossibility of the desire at the center of his life. The language of organs always speaks of an impossible, full satisfaction; the *Weltanschauung* of science, as the ethos of Freud's psychoanalysis, involves trading this full satisfaction for the partial satisfaction of knowledge.

Lawrence argues that the flow of the unconscious must be freed from the “dictatorship of reason.” For Lawrence, the question of the unconscious has nothing to do with the intellect that wants, or is denied, satisfaction. Rather than the satisfaction of the subject, the question of the unconscious has to do with circuit that is satisfied. As Lawrence writes, “As we live, we are transmitters of life. / And when we fail to transmit life, life fails to flow through us. / That is part of the mystery of sex, it is a flow onwards. / Sexless people transmit nothing” (Poems, 449). It is the flow that is important for Lawrence, not the comprehension of the flow. The flow is

necessarily untranslatable, necessarily mysterious, because as a series of relationships it extends beyond the consciousness and life of the individual organism.

The universe flows in infinite wild streams, related
in rhythms too big and too small for us to know,
since man is just middling, and his comprehension just middling.

If once, for a second, the universe ceased to flow
of course it would cease to exist.
The thought is unthinkable, anyhow.

Only man tries not to flow,
repeats himself over and over in mechanical monotony of conceit
and hence is a mess. (Poems, 479)

Beyond the scene of conscious knowledge, the human is connected to a flow of sexual energy where organs signal each other in dark waves of electromagnetic force, and the material interactions of bodies extend beyond what the intellect can conceive or control. In trying to translate the symptom into conscious thought, by removing the human from the universal flow, and thus producing the field of the unconscious as an object of the intellect, Freud's inquiry rests at the level of "secondary nature." It is only by participating in the language of organs—in the flow of energy through ganglia and plexi, that "primary nature" can be realized. It is only by sacrificing knowledge that nature can appear as a field without lack.

II. The Erotics of Lawrence's Flow

Lawrence's essays on psychoanalysis grew, in part, out of "The Crown," which Lawrence drafted as his contribution to series of anti-war lectures that he had planned, throughout 1915, to give with Bertrand Russell. The lectures were canceled when Lawrence broke with Russell after reading and commenting on Russell's draft for his own lecture, entitled "Philosophy of Social

Reconstruction.” When Russell makes the seemingly modest proposal that there is “[n]o need of hate or conflict: only the failure of inward joy brings them about,” Lawrence responds with the marginal note that “[t]here will always be hate and conflict. It is a principle of growth: every bud must burst its cover, and the cover doesn’t want to be burst” (*Letters*, 95). In a letter that Lawrence sent Russell as response to the manuscript, Lawrence attacks Russell, in no uncertain terms, as “[t]he enemy of all mankind” (*Letters*, 6): “[i]t is not the hatred of falsehood which inspired you. It is the hatred of people, all people of flesh and blood” (*Letters*, 6). The severity of Lawrence’s attack on Russell comes from the fact that he reads Russell’s appeal for peace and inward joy as an affront to the logic of his subjective ontology. For Lawrence, the scenes of nature and human subjectivity depend upon an opposition through which the bisexual electrical circuit is maintained. When the opposition between these terms collapses, the logic of nature, of the flow, likewise collapses into “nothingness.” The satisfaction of desire would be the end of desire.

In “The Crown” Lawrence imagines a fight between the lion, “the king of beasts” (1) and the unicorn, “the defender of virgins” (1), over a “Crown that hovers between them, unattainable” (1). “It is,” Lawrence writes, “a greater thing to have an enemy than to have an object” (2). This fight is their “*raison d’être*” (2). Yet if “the lion really destroyed, killed the unicorn [...] would not the lion at once expire? Is not the unicorn necessary to the very existence of the lion, is not each opposite kept in stable equilibrium by the opposition of the other?” (2). The lion and the unicorn are in the “terrible position” of having a “purpose which, if once fulfilled, would of necessity entail the cessation from existence of both opponents” (3). As Lawrence writes “we are, then, rounded upon a void, a hollow want, like the lion. And this makes us draw all things into ourselves, to fill up the void. But it is a bottomless pit, this void. It

ever it were filled, there would be a great cessation from being, of the whole universe” (4), a “sudden crumbling into universal nothingness” (6).

Russell, in arguing for peace, is guilty of “blaspheme against the *raison d'être* of all life” and of trying to “destroy the essential, intrinsic nature of God” (18), for while peace leads to a “universal collapse,” it is through opposition that a “stable equilibrium” is maintained. The problem with the war in Europe is that this structured opposition has ceased. The Lion has “really beat the unicorn” (13), while the unicorn has “achieved supremacy in another field” (13). Each is blinded by its own crown, and so “without rhyme or reason they tear themselves and each other, and the fight is no fight” (13). In that structured conflict is sustains the universe, “it is a greater thing to have an enemy than to have an object” (2).

For Lawrence the tragedy of modern life is that we live in a world that has lost this structured equilibrium, that rather than participate in the logic of the flow that Lawrence describes in his essays on psychoanalysis, we work to impose a human order, a transcendental limit, on the logic of the flow. In both *Women in Love*, and *Lady Chatterley's Lover*, Lawrence argues that the immorality and unhappiness of the industrialist comes as he takes the wrong attitude towards the flow, working to impose his will as a transcendental principle that governs the flow, and thus to reproduce the logic of the flow as an object of human knowledge. In contrast to this attempt to produce the flow of energy as an intellectual object, Lawrence finds a moral participation in this flow of sexualized energy in Ursula's relationship to Birkin, and in Lady Chatterley's relationship to Mellors. As in Pater's *Imaginary Portraits* of Sebastian von Stork and the Prior St-Jean, where human behavior is understood as the negotiation of known and unknown scenes of energy, Lawrence's dual conception of the flow—one ruled by a thermodynamic imposition of equilibrium, the other by the natural flow of forces—becomes a

metapsychological terrain, which his characters must negotiate.

In *Women in Love*, as Gerald's father becomes ill, Lawrence appeals to the same language of collapse and disintegration that, in his reading of Russell, results from an intellectualization of the flow of energies. "The whole unifying idea of mankind seemed to be dying with his father, the centralizing force that had held the whole together seemed to collapse with his father, the parts were ready to go asunder in terrible disintegration"(228). It is in an attempt to master this decentered world that Gerald turns to the mine, and tries to recover the unity that was lost with his father's death. In his new role as a captain of industry, he attempts to construct an oppositional circuit that will limit this "terrible disintegration." Yet the circuit that Gerald constructs is not the vital circuit of Lawrence's primary nature, but the mechanical circuit governed by the mathematical laws of secondary nature. Lawrence writes that Gerald is possessed with the "desire to translate the Godhead into pure mechanism" (236), to find "the perfect system that subjected life to pure mathematical principles" (239), a system that will allow him to become "the God of the machine, Deus ex Machina" (236). The terms of Lawrence's critique are clear. Instead of participating in a vital electrical circuit, Gerald attempts to find a mathematical principle that will bring the various forces of the universe into relation, by finding a common language—that of mathematics—into which all these forces can be translated. Gerald's industrialism thus returns to Lawrence's critique of Einstein's theory of relativity. As noted above, the truth of the theory of relativity is that "The great cosmic forces or mechanical principles can only be known in their relation to one another, and can only exist in their relation to one another" (191). However, he argues, "this relation between the mechanical forces is constant, and may be expressed by a mathematical formula" (191). The "equation formula" that relates these relative forces in a common mathematical language "is the deus ex machina in

Einstein's physics" (191). Gerald translates the "Godhead" in that he, like Einstein, wants to come up with a mechanical principle that will impose a rigid form on the field of forces that composes the universe.

For Gerald, as for Lawrence, the scene of these tumultuous forces is that of a divide between an upper and lower region. Gerald's attempt to impose a "deus ex machina" on the relation between these forces comes through his mining reforms. As Lawrence writes, "New machinery was brought from America [...] all the control was taken out of the hands of the miners [...]. Everything was run on the most accurate and delicate scientific method, educated and expert men were in control everywhere, the miners were reduced to mere mechanical instruments"(238). This scientific method imposes a divide between a scene of intellectual control, in which Gerald manages the mine from his office on surface of the earth, and the physical labor of the miners work in the bowels of the earth. Like Lawrence's opposition between solar plexus lumbar ganglion, this opposition between two distinct levels is maintained by an electrical circuit, as Gerald's chief innovation involves electrifying the mine. "Expert engineers were introduced in every department. An enormous electric plant was installed, both for lighting and for haulage underground, and for power. The electricity was carried into every mine" (238). Gerald's "translation of the Godhead" is astonishing in its accuracy, as the electrified scientific management of the mine replicates the flow of electrical energy between the two levels of the human.

Yet in playing at being a "God of the machine," Gerald removes himself from the subjective processes of the flow, and encounters the full weight of the "void [and] hollow want" (4) at the center of human subjectivity. Again echoing the language of Lawrence's response to Russell, Gerald says that "you seem to be clutching at the void—at the same time you are the

void yourself.—And you don't know what to do" (338). It is to fill this "infinite void" (351) that Gerald turns to Gudrun, sneaking into her bedroom in the middle of the night. When he finds her, it is an "infinite relief. Into her he poured all his pent-up darkness and corrosive death, and he was whole again" (358). In his recovered wholeness, he is "like a child at the breast." He is "infinitely grateful, as to God, or as an infant is at its mother's breast" (359). In producing the flow as an external relation, Gerald excludes himself from a participation in the flow. Gerald thus takes Gudrun as a limit to his unstructured subjective experience. The problem of Oedipal sexuality arrives as the consequence of Gerald's translation of, and thus exclusion from, the oppositional energy of the "Godhead."

While Gerald, replenished by his newfound mastery, "slept the perfect sleep," Gudrun is filled with horror: "They would never be together. Ah, this awful, inhuman distance which would always be interposed between her and the other being!" (360) Gudrun, taken as the object that will satisfy Gerald's desire, realizes not only the distance between them, but also the failure of any object that could satisfy her desire. "Oh God, the wheels within wheels of people, it makes one's head tick like a clock, with a very madness of dead mechanical monotony and meaninglessness. How I *hate* life, how I hate it. How I hate the Gerald, that they can offer one nothing else" (482). Gudrun wants relief—a "pure, deep, healing rest" (483)—but there is no one to grant her reprieve: "What then! Was she his mother? Had she asked for a child, whom she must nurse through the nights, for her lover? She despised him, she despised him, she hardened her heart. An infant crying in the night, this Don Juan" (484). Gudrun's horror at her exclusion from a participation in an ideal sexual relationship thus marks the return of the universal collapse that Gerald's "translation of the godhead" had worked to prevent. Gudrun, taken as an Oedipal object, is Gerald's solution to the problem his own exclusion from the flow of the electrical

circuit, but this solution is no solution at all. Gudrun is left bearing the weight of this subjective excess, which she registers as an “inhuman distance” between any two beings. The failed relationship serves to clarify the forces of Lawrence’s distinction between the natural flow and its intellectual perversion. Because Gerald severs the action of the flow from subjectivity he is cut off from participating in nature. In that Gerald intellectualizes the logic of the flow, and in doing so, prevents himself from participating in it, he embodies the scientific method that Lawrence critiques in the essays on psychoanalysis. The failure of a sexual relationship between Gerald and Gudrun appears as the consequence of the fissure between Gerald's objective science and his subjective life.

Gudrun is thus left bearing the full weight of the void at the center of the subject, of an unsatisfiable “hollow want.” While for both Gudrun and Gerald a scene of unstructured subjectivity emerges as the remainder of industrial life and Oedipal sex, in Ursula and Birkin's sexual encounter a circuit is revealed from which nothing is excluded. Ursula falls to Birkin’s loins: “Kneeling on the hearth-rug before him, she put her arms round his loins, and put her face against his thighs. Riches! Riches!”(324). It is not the Oedipal satisfaction of an ideal object that they experience, but in Birkin’s words, “more than that” (324): his loins are “this dark, subtle reality of him, never to be translated. [...] The suave, pure, untranslatable reality of his loins of darkness” (331).

She traced with her hands the line of his loins and thighs, at the back, and a living fire ran through her, from him, darkly. It was a dark flood of electric passion she released from him, drew into herself. She had established a rich new circuit, a new current of passional electric energy, between the two of them, released from the darkest poles of the body and established in perfect circuit. It was a dark fire of electricity that rushed from him to her, and flooded them both with rich peace, satisfaction. (331)

While Gerald constructs an electrical circuit that connects to the bowels of the earth, Ursula finds

an electrical “life motion,” that proceed downwards from Birkin's thighs. Whereas Gerald, “translates the Godhead” by bringing it under mathematical control, this flow is established by the relative relations of the forced in play. As Ursula explores Birkin's loins she moves “unconsciously.”

With her sensitive finger tips, she was tracing some mysterious life-flow there. She had discovered something, something more than wonderful, more wonderful than life itself. It was the same mystery of his life-motion, there, at the back of the thighs, down the flanks. It was a strange reality of his being, the very stuff of being, there in the straight down flow of the thighs. It was here she discovered him one of the sons of God such as were in the beginning of the world, not a man, something other, something more. (325)

Through the repetition of equally mysterious terms—a “mysterious life-flow”; “something more wonderful than life”; a “mystery of life-motion”; “his being”; “the very stuff of being”; “the beginning of the world”—Ursula and Birkin participate in a flow that extends beyond their understanding. Ursula moves her hands “down his back slowly, with a strange recurrent, rhythmic motion, yet moving slowly down, pressing mysteriously over his loins, over his flanks” (328). The unconscious, recurrent and rhythmic motion of the flow is equally the structure of Lawrence's paragraph, where repetition of equally mysterious terms establishes the “more than” of the flow. Whereas Gerald produces an industrial metaphor of the flow, forging a circuit between the surface and the mine, this imitation of nature excludes Gerald's own subjective experience. The flow into which Birkin and Ursula are interpellated seems to proceed by a metonymic logic, in that it emerges through the repetition of internally linked phrases.

In *Modernism and the Fate of Individuality*, Michael Levenson notes Lawrence's tendency to either repeat or contradict himself from one sentence to the next within a paragraph, and reads this tendency in terms of the novels' thematic concern about the relationship between unity and disintegration. As Levenson writes, while “in one obvious sense reversal is the

antithesis of repetition [...], they are both incompatible with consecutive development” (152). For Levenson these contradictions are part of an attempt “to recover dualism from an encroaching monism, to establish two great streams instead of one dark river” (155). Levenson concludes that “[n]ext to the harmony of the ideal, the novel’s many disharmonies seem a confession of failure, but they seem far less discouraging when set against the perfect stability of death”(165). Yet far from a confession of failure, this refusal of “consecutive development” works to establish a relational meaning, as Lawrence, in articulating the flow of the electrical unconscious, works to articulate a relation beyond what Levenson identifies as a dialectic of unity and disintegration. While Gerald's attempt to find unity results in a kind of disintegration, the electrical flow established between Birkin and Ursula, where the unity is not imposed by an external force, is immune to the threat of disintegration.

Gerald's intellectualization of the logic of natural energies emerges out of a disgust for a certain logic of the organism. Early in *Women in Love*, in Halliday’s apartment, Birkin and Gerald contemplate an African carving. When Birkin argues that he can see in it “centuries of development in a straight line [...] an awful pitch of culture” (80), Gerald is horrified. “‘What culture?’ Gerald asked, in opposition. He hated the sheer African thing” (80). Indeed, his disdain for the carving would seem to foreshadow his reduction of Gudrun, the avant-garde artist who makes her own small wooden figurines, to an oedipal object. Birkin affirms his affinity with this African carving later in the novel when he recalls an “African fetish,” “a tall, slim, elegant figure from West Africa, in dark wood, glossy and suave” as “one of his soul’s intimates” (262). The fetish has a face “with tiny features like a beetle’s” (263) and a knowledge that was “far beyond any phallic knowledge, sensual subtle realities beyond the scope of phallic investigation” (263). The figure has a “mystic knowledge in disintegration and dissolution, knowledge such as the

beetles have, which live purely within the world of corruption and cold dissolution” (263). While Gerald is overwhelmed by a “pent-up darkness and corrosive death” (358) that emerges of his anxiety over the possibility of a “universal collapse,” the beetle has a knowledge about how to live in the world of corruption and dissolution. As Lawrence continues, this knowledge of disintegration and dissolution “was why the Egyptians worshipped the ball-rolling scarab” (263).

While Gerald recoils in horror from the figurine, Birkin's meditation on the figure leads him to a comparison of Europe and Africa. While Africa has died one kind of death, in “the putrescent mystery of sun-rays” (263), Europe will die another in the “destructive frost mystery” (264). This division of Europe and Africa into two distinct zones follows Lawrence's division the universe into two levels, “the unchanging great division in the psychic and the physical structure [...] the unchanging great division in knowledge and function” (77) that structures the flow of energy though the universe. The division between Africa and Europe reaffirms a division between “a brightness which became the sun,” and “a darkness which felt like an unrisen moon,” a division which is reflected in human physiology as the difference between “the solar plexus and lumbar ganglion” (76), which themselves correspond to the incorporative function of the mouth, and the excremental function of the bowels. It is with respect to these oppositions that the resemblance between the beetle-like face of the figure and the “ball-rolling scarab” derives its critical force. The African fetish at once evokes a history and a religion that are alien to Europe, and articulates a logic through which this division between rational, scientific thought (Europe) and irrational vital subjectivity (Africa) is overcome. The ball that the scarab rolls is a ball of dung into which the beetle injects an egg. When the egg hatches, the larva grows as it feeds on the ball of excrement. The beetle thus becomes a trope for the interaction between these polar opposites. It lives in a world of “corruption and cold dissolution,” and is part of “destructive frost

mystery” (264), yet is a symbol of Africa's death in “the putrescent mystery of sun-rays” (263). The ball that the beetle pushes is both excrement and food. In it, the functions of the bowels and mouth become coincident as an excremental remainder becomes a source of nourishment.

In *Another Kind of Love*, Christopher Craft notes that after Lawrence's first exposure to homosexuality, during a visit to Cambridge, he recorded a dream in which there is “a beetle that bites like a scorpion.” Craft notes that scorpions don’t bite, but sting with their tails: “the mouth/tail or orifice/penetrator confusion expresses with hallucinatory accuracy the semantic lability of ‘sodomy,’ the elastic and ‘absolutely confused category’ that historically had subsumed, among other variations, both oral and anal modes of conjunction, often without modernity’s fastidious concern to the anatomical sex of the persons thus conjoined” (158). While the beetle evokes the “confused category” of sodomy, as Jonathan Dollimore writes, Lawrence had an “ambivalent attitude to homosexuality” (104). “If, in the homosexual embrace, [anal sex] is imagined as the sterile desire for dissolution and death, in the heterosexual embrace it seemingly becomes the transgressive search for life at its most searingly intense—a shattering of the self into a vulnerable, receptive authenticity”(105). It is because Lawrence understands anal eroticism through the coprophagia of the dung beetle that anal erotics opens to the logic of primary nature.

In a certain sense coprophagia is the mode of relation through which the natural world is sustained. It is only through the articulation of a circuit through which food becomes excrement, and excrement becomes food, that nature can be conceived of as a self-sufficient system. Indeed, the historical development of the science of thermodynamics—the study of the transformation of energy—is coincident with scientific research into coprophagia. “In biology, the spontaneous generation of life from decaying substances was a prevalent view as recently as the seventeenth

and eighteenth centuries.” It was thought, for example, “that flies arose spontaneously from faeces” (*Rationality in an Uncertain World*, 157). Helmholtz writes that, before an understanding of thermodynamics processes, people “were not aware that eating could be connected with the production of mechanical power. Food, they believed, was wanted only to restore the little damages in the machine, or to keep off friction, like the oil which made the axles of wheels to run smoothly” (115-6). Before the thermodynamic articulation of the organism as machine for transforming energy, it seemed that flies arose spontaneously from feces. Through the realization that the egg draws nourishment from waste, coprophagia appears as the engine of these material transformations. A scientific articulation of the origin of life, and the processes through which life is sustained, turns around the scene of coprophagia, as the inhuman mode of conjunction through which the animal world is sustained.

When, in his management of the mine, Gerald replicates the logic of an electrical current that moves between the two levels of the human, his own subjective life appears as an obscene remainder that horrifies Gudrun. In the relationship between Birkin and Ursula, modeled on the dung beetle, the corruption, death, and dissolution that horrify both Gerald and Gudrun are eroticized. If, in the dung beetle, the incorporation of excrement enacts the flow between the series of oppositions—death and life, anus and mouth, lumbar ganglion and solar plexus—that structure the division Lawrence's universe, then it would seem that the “untranslatable” electrical flow, moving from Birkin's loins to Ursula's mouth as Ursula kneels behind Birkin, stands in for the unspeakable coprophagia of the dung beetle. Just as the dung beetle is a symbol for Ra, the Egyptian god of the sun, the “something more” that Ursula experiences is linked to her description of Birkin as “not a man” but “one of the sons of God.” The circuit that Gerald forges through his scientific management of the mine is governed by a “God in the machine,” and

produces Gerald's subjective life as an obscene remainder. The circuit that Birkin and Ursula forge is governed by a different kind of God, who lives in corruption and death, and serves as a support for a metaphoric reincorporation of this obscene, excluded subjectivity. The internal relations through which the flows of the universe are maintained are figured as the process through which waste is transformed into nourishment, and in which the problem of a subjective remainder ceases to exist.

The relationship of waste to anal erotics becomes the central concern of *Lady Chatterley's Lover*. As in *Women in Love*, a mechanistic discourse, where “man tries not to flow,” and “repeats himself over and over in mechanical monotony of conceit / and hence is a mess (*Poems*, 479)” serves to produce subjectivity as the excremental remainder that is eroticized in a redemptive scene of anal intercourse. The failure of mechanism becomes the necessary support of a successful vital flow, in that it produces the excremental remainder that is incorporated in the ecstatic flow of sexual energy. This double move is essential for understanding how it is that Lawrence produces a fantasy of primary nature. The flow of primary nature appears only as the negation of the intellectualization of the flow. The universal flow is only possible, because of the failure of the intellectualization of the flow.

Clifford is paralyzed from the waist down, and thus cut off from the lower regions where, Lawrence argues, the vital unconscious resides. Early in the novel he takes on a nurse, Mrs. Bolton, who both infantilizes him, and transforms him into a man of industry. It is “[u]nder [her] influence,” that “Clifford began to take a new interest in the mines. He began to feel he belonged. A new sort of self-assertion came into him. After all, he was the real boss in Tevershall, he was really the pits. It was a new sense of power, something he had till now shrunk from with dread”(109). Mrs. Bolton “said to Connie one day: 'All men are babies, when you

come to the bottom of them. Why, I've handled some of the toughest customers as ever went down Tevershall pit. But let anything ail them so that you have to do it for them, and they're babies, just big babies. Oh, there's not much difference in men" (103). In one way, Lawrence writes, "Mrs Bolton made a man of him, as Connie never did. Connie kept him apart, and made him sensitive and conscious himself and his own states. Mrs Bolton made him aware only of outside things. Inwardly he began to go soft as pulp. But outwardly he began to be effective" (112). This indifference to subjective life and experience transforms him into "almost a *creature*, with a hard, efficient shell of an exterior and a pulpy interior" (115). As in Gerald's case, Clifford's engagement in the industrial world is internally related to an infantilizing Oedipal sexuality that functions to manage and limit the fact of subjective life.

This industrial creature has the same form as the "ball-rolling scarab," yet where the dung beetle is a signifier for the movement between inside and outside, between food and excrement, the industrial creature comes to signify the impossibility of a movement between inside and outside. The dung beetle expresses the philosophy of Lawrence's universal flow, while this industrial creature expresses Clifford's own philosophy of "conservative-anarchism." As Clifford explains, this means that "people can be what they like and feel what they like, strictly privately, as long as they keep the *form* of life intact, and the apparatus" (187). While Connie argues that the desperation of the masses is caused by the structure of industrialization, Clifford counters that it is this structure that allows the masses to survive. Their livelihood, and thus their anarchical freedom, requires the rigid structure of industrial life. It is the workers choice to participate in the form of life they choose. As Clifford says, "I can't live their lives for them. Every beetle must live its own life" (189). The separation of the form of life from an anarchical freedom—in which subjectivity is lost to discourse—transforms Clifford into a "*creature*" and

the miners into “beetles.” Whereas the dung beetle, as the “ball-rolling scarab” that the Egyptians worshipped, is linked with a theological signifier, these beetles are a symbol of a base animality, of a world from which an animating spirit has withdrawn.

Cut off both figuratively—as an industrial creature—and literally—as a paraplegic—from the lower centers that in which, Lawrence argues, subjective life resides, Clifford makes several attempts to produce a circuit that will unify what Lawrence describes as the two levels of the human. As in the case of Gerald's mining innovations, Clifford plans to electrify the mine. Yet whereas Gerald's idea is to use electricity to improve the efficiency of the mine, Clifford's idea is to use a waste coal to produce electricity.

Clifford's idea was, that his coal, even the poor sort, could be made into hard concentrated fuel that would burn at great heat if fed with certain damp, acidulated air at a fairly strong pressure. It had long been observed that in a particularly strong, wet wind the pit-bank burned very vivid, gave off hardly any fumes, and left a fine powder of ash, instead of the slow pink gravel.

‘But where will you find the proper engines for burning your fuel?’ asked Winter.

‘I’ll make them myself. And I’ll use my fuel myself. And I’ll sell electric power. I’m certain could do it. (155-156)

On the one hand, Clifford's innovation narrates historical fact. As Neil Buxton writes, electricity had been used in mining from the 1880's on, “in virtually every mining operation requiring mechanical power”(108), and by the first decades of the twentieth century it was discovered that “waste heat could be profitably employed to generate electricity”(109). Buxton continues that “by the first world war, a high proportion of collieries possessed their own small generating plants” (109). By using waste coal to produce electricity, industrial progress is aligned with a thermodynamic observation that waste contains energy, and thus value. Clifford's creative contribution to the history of industry becomes, for Lawrence, coincident with the attempt to replicate a natural coprophagic circuit, in which waste is transformed into energy.

This same attempt to construct a mechanical relationship to his loins appears in Clifford's gas-powered wheelchair. Clifford's paralysis is both a mark of his separation from his subjective life, and of his industrial prowess. As he says to Connie, "[n]either my mind nor my will is crippled, and I don't rule with my legs" (190). When Clifford, in his wheelchair, and Connie, on foot, take a walk on the grounds, Clifford quips that he is "Sir Clifford on his foaming steed"(186), and continues that "I ride on the achievements of the mind of man, and that beats a horse"(186). Clifford's fantasy of mastering this circuit fails not in the pits, but in relationship to his own paralyzed limbs. When Clifford tries to climb a hill in his motorized chair, the motor is not strong enough, and he becomes stuck. Finally, Clifford gives up, and asks Mellors to help push the chair up the hill. "With a strange noise the chair was fighting the hill. Mellors pushed steadily behind, and up she went" (196). In this fight between man and a machine—an effort that almost kills Mellors, who is left exhausted, "his heart beating and his face white with the effort, semi-conscious" (198), Lawrence underlines the failure of Clifford's mechanical mastery of his legs, bowels, and sex. In Clifford's failure to bring his lower regions under mechanical control, it is Mellors who is forced to take the place of the original that the prosthesis is supposed to replace. This identification of Mellors with a primal and dark energy is underscored by Mellors's first name, Oliver, which at the turn of the century was common slang for the moon (OED), that "other white pole of cosmic volition" in which reside "the great forces of magnetism and electricity"(*FU*, 172). It is Mellors who discovers how subjectivity, figured as the same kind of excremental remain that Clifford hopes to purify into fuel, can be incorporated into a new form of life, which leaves no subjective remainder.

It is thus no surprise that Connie's relationship to Mellors is mediated through the bowels. The first time Mellors sees Connie, "there was something so mute and forlorn in her, compassion

flamed in his bowels for her” (120). After a sexual encounter, “Connie went slowly home, realizing the depth of the other thing in her. Another self was alive in her, burning molten and soft in her womb and bowels, and with this self she adored him” (140). It is the fact of Connie's material, excremental, existence that most interests Mellors: “Tha'rt real, tha art! Tha'art real, even a bit of a bitch. Here tha shits an' here tha pisses: an' I lay my hand on 'em both an' like thee for it. I like thee for it. Tha's got a proper, woman's arse, proud of itself. It's none ashamed of itself, this isna” (232). It is not in spite of an association with shit and piss that Mellors eroticizes Connie's anus and vagina. Rather, they are privileged because they are sites of excrement.

When Mellors and Connie have anal sex, it is figured as a purification of the body from shame. “Though a little frightened, she let him have his way, and the reckless, shameless sensuality shook her to her foundations, stripped her to the very last, and made a different woman of her”(257). Rather than give a physical description of Mellors's penis or Connie's anus, Lawrence narrates the scene through a series of metaphors for purification. It is “necessary,” Lawrence writes, “forever necessary, to burn out false shames and smelt out the heaviest ore of the body into purity. With the fire of sheer sensuality” (257-8). In Lawrence's metaphor Connie's anus becomes a pit mine in which Mellors encounters a heavy ore that must be processed. Just as Clifford transforms waste coal “into hard concentrated fuel that would burn at great heat” (155), a “fire of sheer sensuality” (257) purifies the “ore” of Connie's shame. Connie's “shame” Lawrence suggests, is an insult to sex, and obscenity is overcome by the fire of a “shameless sensuality” that liberates Connie.

In *Pornography and Obscenity*, Lawrence writes that “[p]ornography is the attempt to insult sex, to do dirt on it” (12). Shame, in these terms is the product of this insult to sex. Lawrence thus argues that his explicit language and narration are neither pornographic nor

obscene because it is only shame that makes sex obscene. Yet in figuring the scene of anal sex as the restoration of a pure sexuality, Lawrence's erotics becomes dependent on obscenity. Since the purification of obscenity is the erotic content of the scene of anal sex, if there were there no obscenity to purify, this scene of anal sex would lose its erotic potential. Lawrence's idea of a purifying sex that functions to repair the identification of desire with obscenity and shame can only function if the subject is identified as obscene and shameful. Without the problem of an excluded subjectivity, there would be no need to articulate a discourse to repair this exclusion. Without a "heaviest ore" there is nothing to purify. The erotics of this experience, which helps return Connie to her "natural sexual flow" (276), depends both rhetorically and materially on the existence of a mode of subjective interiority that is excluded from discourse.

Lawrence, it seems, would agree with Freud that human sexuality exists in terms of a relationship with disgust and shame.

Such feelings [of disgust] seem originally to be a reaction to the smell (and afterwards also also to the sight) of excrement. But the genitals can act as a reminder of the excremental functions; and this applies especially to the male member, for that organ performs the function of micturition as well as the sexual function. Indeed, the function of micturition is the earlier known of the two, and the only one known during the pre-sexual period. Thus it happens that disgust becomes one of the means of affective expression in the sphere of sexual life. The Early Christian Father's "inter urinas et faeces nascimur" clings to it and cannot be detached from it in spite of every effort at idealization. (Dora, 24)

In *Three Essays*, Freud writes that while "Disgust seems to be one of the forces which have led to a restriction of the sexual aim [...]. The sexual instinct in its strength enjoys overriding this disgust" (*Three Essays*, 18). In other words, as Tim Dean writes, desire and disgust are "two sides of the same coin" (24). In the "polymorphously perverse disposition [...]" the mental dams against sexual excesses—shame, disgust, and morality—have either not yet been constructed at all or are in course of construction, according to the age of the child. In this respect children

behave in the same kind of way as an average uncultivated woman in whom the same polymorphously perverse disposition persists” (*Three Essays*, 57). As Dean argues, “Sexual desire might be described as that which can be satisfied only by exceeding a limit, specifically, a boundary of one's own psychic constitution. It is not just culturally conventional boundaries but one's own real limits that must be defeated in order to achieve complete erotic enjoyment”(137). If disgust is a sign of repression, the work of desire, of a “polymorphous perverse disposition,” involves the labor to eroticize the unidealized material of the body, to find, in the overcoming of the ego's disgust for the body, a limitless enjoyment. It is in the overcoming of a disgust at the body, through an eroticization of a body rendered obscene and shameful by moral judgment, that Connie comes to participate in a naturalized scene of sexual energy.

In the anal sex scene, Lawrence's metaphoric language shifts, as Connie's fear and shame are “roused up and routed by the phallic hunt of the man”(258) that finds, “at the core of the physical jungle, the last and deepest recess of organic shame”(258). While the comparison of Connie's anus to a mine depends upon a certain analogic similarity—both are dark openings—here, Connie's anus becomes a tropical “jungle,” through which the phallus passes, as if on a dangerous or difficult safari. As Lawrence writes, it “took some getting at, the core of the physical jungle” (258), and “the phallus alone could explore it” (258). A scene of absolute interiority, generally excluded from both visual and narrative representation, becomes an exterior scene, a “jungle.” As this phallic hunt cures Connie of her shame, a problem of subjectivity becomes coincident with physical interiority.

At the same time that the “inside”—Connie's anus—becomes a visually conceivable “outside,” Mellors and Connie become internal to a discourse that is governed by fetishistically detached genitalia. As they lie in bed, Mellors and Connie consider Mellors' penis as an object

that neither of them possesses. “‘And now he’s tiny and soft like a little bud of life!’ she said, taking the soft small penis in her hand. ‘Isn’t he somehow lovely! so on his own, so strange! And so innocent! And he comes so far into me! You must never insult him, you know. He’s mine too. He’s not only yours. He’s mine! And so lovely and innocent!’”(219). When Connie comments on Mellors’s pubic hair, Mellors responds that “‘That’s John Thomas’s hair, not mine!’”(219), and continues that “‘He’s got his root in my soul has that gentleman! An’ sometimes I don’ know what ter do wi’ him. Ay, he’s got a will of his own, an’ it’s hard to suit him. Yet I wouldn’t have him killed” (219). “‘No wonder men have always been afraid of him!’ she said. ‘He’s rather terrible” (219), to which Mellors responds “‘There! Take him then! He’s thine” (219). When, alone, Connie considers the “sense of freedom and life” that Mellors has given her, by restoring her “natural sexual flow”(276), she is struck by “the image of him, naked white with tanned face and hands, looking down and addressing his erect penis as if it were another being”(276).

As Mellors's penis becomes a separate entity, Connie’s genitalia is, likewise, separated from her body. Mellors tells Connie that “‘th’art good cunt, though, aren’t ter? Best bit o’ cunt left on Earth. When ter likes! When tha’rt willin’!”(185). Connie responds by asking what “cunt” means.

'What is cunt?' she said.
 'An' doesn't ter know? Cunt! It's thee dow thee; an' wha I get when I'm i'side thee, and what tha gets when I'm i'side thee; it's as it is, all on't.'
 'All on't,' she teased. 'Cunt! It's like fuck then.'
 'Nay nay! Fuck's only what you do. Animals fuck. But cunt's a lot more than that. It's thee, dost see: an' tha'rt a lot besides an animal, aren't ter? — even ter fuck? Cunt! Eh, that's the beauty o' thee, lass!' (185)

Mellors's definition of “cunt” as a particularly human sensation of having sex seems far from the standard use of “cunt” as an obscene term for female external genitalia. This disembodied genitalia, like Mellors’s disembodied penis, locates Mellors and Connie as moments within the

impersonal flow of Lawrence's unconscious.

Dean writes, in a lucid account of the history of the fetish in psychoanalytic thought, that “by showing how human sexuality has less to do with genitalia than with the unconscious, Freud argued that nothing is sexual until it is made so”(148).

Sexuality conforms to the dictates of fantasy, not to those of anatomy. Even genitalia require sexualization before they can be considered erotic, as any child will tell you. At a certain moment in the history of psychoanalytic thought, Lacan turned Freud's theory of fetishism on its head by declaring that, rather than the fetish substituting for the mother's missing penis, the penis itself take on the value of a fetish. Lacan's claim is that heterosexual women fetishize—although he might as well have said that gay men do so too. Indeed, plenty of straight men seem to fetishize their own penises. (148)

Thus, as Dean continues, “psychoanalytic accounts offer a description of human sexuality as ineluctably fetishistic, in the sense not of referring ultimately to the penis (or the phallus) but of drawing attention to the fantasmatic transformation of objects that have no preordained value”(148). As Lawrence transforms various sites of the body—the womb, bowels, penis, and vagina—into detached erotic objects, these objects become signifiers within an unconscious logic. As a structural element in this bisexual flow, Connie's identity is reduced to the fact of her biological sex. As she notes, with Mellors “it wasn't really personal. She was only really a female to him” (127).

But perhaps that was better. And after all, he was kind to the female in her, which no man had ever been. Men were very kind to the person she was, but rather cruel to the female, despising her or ignoring her altogether. Men were awfully kind to Constance Reid or to Lady Chatterley; but not to her womb they weren't kind. And he took no notice of Constance or of Lady Chatterley; he just softly stroked her loins or her breasts. (127)

Connie vanishes as a “person” and reappears as a set of erogenous zones that sustain the flow of a trans-subjective energy.

Lawrence writes in one of his *Pansies* that “As a plant becomes pot-bound / man

becomes ego-bound / enclosed in his own limited mental consciousness” (*Poems*, 474). In this metaphor, the ego-bound man will die, “Unless he is a sturdy plant. / Then he can burst the pot, / shell off his ego / and get his roots in earth again, / raw earth” (*Poems*, 475). While the pot-bound ego is separate from the world, Lawrence's subject is part of the world, for this subjective world is not opposed to, but rather falsified by, the division between self and world, between ego and non-ego. The subject is not produced in relationship to an outside, just because the problems of “interiority” and “exteriority” have nothing to do with the scene of subjectivity. For Lawrence, the unconscious is the truth of physical reality. Subjectivity is no longer excluded from the external world, for Lawrence places the “pristine unconscious” at the limit where pure interiority collapses into pure exteriority.

Francis Ferguson notes that for all the transformative rhetoric of Lawrence's flow, these transformations seem to have a minimal effect on the social world. As she writes, “if Connie Chatterley has been formed by the sexual evangelism that changes bodies and lives, her conversion looks suspiciously like a matter of her being duped”(142). Rather than read Connie's transformation as linked to a modest class rebellion, Ferguson suggests that the novel works to solidify Connie's relationship both to Clifford, and to legitimate English society. Ferguson notes that “Mellors's job”—as a gamekeeper—“commits him to protecting Clifford's property against the members of his own class, the colliers whose poaching might thin out the ranks of Clifford's game” (143). Rather than abandon his job, which would result in Connie becoming a kind of “fair game” (143), Ferguson argues that even after Mellors leaves England he continues to function as a gamekeeper. This allows Lawrence to argue for a “game-law theory of marriage” that ensures Clifford's continual possession of Connie. “Game,” writes Ferguson, is “a movable version of real, that is, immovable property, is not a landholder's because of its emanating from

his land. Game, rather, is the landholder's property because it can never escape his claim no matter how far it strays" (144).

Lady Chatterley's lover is Clifford's gamekeeper. Lady Chatterley's lover is the gamekeeper. Lady Chatterley is Clifford's game. It is not, however, that Connie Chatterley is Clifford's game because he possesses her as he does the rabbits or because she is as promiscuous as a rabbit. Instead, it is that in Mellors's dialect that her name is rabbit [...]. The gamekeeper keeps Connie. (145)

It seems clear that the erotics of the relationship between Mellors and Connie depends upon, rather than revolts against, the class structure that situates their relationship. However, it is not merely the case that Mellors's relationship to Connie maintains Connie within the legitimate world of property. For at the same time their relationship serves to eroticize the differences of class and property that overdetermine their relationship, and thus to situate these "legitimate" claims of class and property within the logic of Lawrence's unconscious.

In the novel's epistolary conclusion—which for Ferguson marks the difficulty for Mellors and Connie of overcoming the illegitimacy of their relationship, and thus is evidence that the novel fails in its modest class rebellion—the lovers address each other in terms of their illegitimate, erotic marriage, as "Lady Jane and "John Thomas." While this illegitimate marriage, which is celebrated when Mellors and Connie adorn their genitalia with flowers and Mellors proclaims that "This is John Thomas marryin' Lady Jane [...]. An' we mun let Constance an' Oliver go their ways"(237), offers an alternative to Connie's legal marriage to Clifford, it too depends on class differences, for John Thomas—which from the mid-nineteenth century was slang for a liveried servant—is like a penis in that it "'stands' in the presence of a lady"(Cassell's *Dictionary of Slang*, 810). Ferguson's reading of a "game-law theory of marriage" roughly coincides with Clifford's own theory of conservative-anarchism, in that both declare that people can do what they want as long as the form of life is maintained.

Lawrence seems to suggest, however, that the social order, itself, can be fetishized, and thus taken up into the logic of the transformative unconscious flow. Just as the logic of thermodynamics is initially presented as an exclusion of the subject but, when fetishized in a scene of anal eroticism, becomes the means through which this exclusion is overcome, class relations, when fetishized, are appropriated in the service of a erotics. While, as Ferguson suggests, Lawrence might be profoundly disinterested in changing the social order—for it is just this set of differences that becomes fetishistic material—it would be equally wrong to suggest that Lawrence is interested in maintaining the social order. In terms of Lawrence's erotics, the form of social relations is neither good nor bad: social relations are only the material through which Lawrence articulates the logic of his vital unconscious. The problems of a social formations—as the exclusion of subjectivity from Clifford's conservative-anarchism—becomes coincident with the erotic potential inherent within it. For if the social world excludes, as obscene, a mode of human experience, it is only on the basis of this obscenity that Lawrence erects his vital unconscious.

III: Lawrence's Animals

It is only by abandoning a search for intellectual control, Lawrence argues, that one can come to participate in the logic of the “universal flow.” Given that he opposes industry and intellectualism to a participation in nature, it is no surprise that for Lawrence animal being appears as a privileged site of resistance. It is through a consideration of the alien world of the animal that Lawrence theorizes the relationship between knowledge and the material fact of the universal flow. While there is no way to enter into the subjective world of the animal, humans

and animals share the same world of action. This shared world of action, beyond knowledge, allows Lawrence to theorize the universal flow.

Carrie Rohman proposes that for Lawrence “anti-industrialism and antirationalism are pivotal axes of thought that correspond—however complexly—with a kind of recuperative stance toward the animal”(25). As Rohman continues, “Lawrence privileges the being of animals and seems to ascribe to them a more pure ontological mode that exists outside language that, if restored to the human animal, can save him or her from the deadening effects of advanced socialization”(103). This privileging of the animal being thus walks a delicate line “between respecting and co-opting the alterity of the animal other”(130). Lawrence works to deanthropomorphize the animal, and to thus expose an inhuman mode of animal being. This animal being functions as a limit to the human. And yet at the same, time the inhuman world of the animal provides a model for a deanthropomorphized humanity, in which the human overcomes this limitation and participates in the richly satisfying world of animal being. This double figuring of the animal depends, as Rohman writes, on the fashion in which Lawrence “spiritualizes the animal”(99). If, in Clifford's description, the workers scurry in the pit like beetles, it is when the beetle is conjoined with the theological, as in the case of “the ball-rolling scarab” that “the Egyptians worshipped”(*Women*, 263), that the animal opens to the possibility of a discourse of the subject.

For Lawrence, then, the animal would seem to have a dual function. The animal at once offers a limit to the human intellect, and an entrance to the logic of the flow of energy that operates beyond the limits of knowledge. This tension is clearly apparent in the sequential poems “Bat” and “Man and Bat.” In the first poem, “Bat,” the bat is only approached in terms of Lawrence's own emotional response to the bat. Bats are “Creatures that hang themselves up like

an old rag, to sleep; / And disgustingly upside down. / Hanging upside down like rows of disgusting old rags / And grinning in their sleep. / Bats!”(*Poems*, 342). This is a fully anthropomorphic language, in which the bats are described in terms of their resemblance to signifiers within the human world: Lawrence finds a visual resemblance between the form of a bat and the form of “rows of disgusting old rags”(*Poems*, 342) hanging up to dry. Any consideration of the subjective world of the bat is rigorously excluded from the poem.

While in “Bat,” Lawrence is in the position of a removed spectator contemplating an aesthetic object, in the following poem, “Man and Bat,” he encounters a bat, flying around his room, at mid-morning. Lawrence's initial reaction to the bat is the same as in “Bat.” The bat is “disgusting,” “intolerable,” and “impure”(*Poems*, 342). Lawrence chases the bat around the room, waving his white handkerchief, but the bat will not leave. Every time the bat approached the open window, he “blew back, as if an incoming wind blew him in again”(*Poems*, 343). Lawrence eventually notes that “He *could* not go out, / I also realized.... / It was the light of the day which he could not enter, / Any more than I could enter the white-hot door of a blast furnace. // He could not plunge into the daylight that streamed at the window. / It was asking too much of his nature”(344). As in the scene of transformative sex between Clifford and Connie, a series of moral and aesthetic judgments are first presented as an obstacle to a participation in the logic of the flow. It is by overcoming this disgust that the logic of nature can reveal itself. Lawrence’s disgust at the bat, like Gerald’s disgust at the beetle face of the African figurine, eventually opens to the logic of primary nature.

The poem thus becomes a kind of ethological study, in that Lawrence attempts to understand the bat's subjective world. He turns on the electric light, “thinking: / *now the outside will seem brown*”(344), but this attempt to intervene in the bat's subjective world fails. Finally,

the bat, exhausted, cowers in the corner. The bat continues to disgust Lawrence. It is “something unclean” that “must not squat, nor hang, obscene, in my room”(346). Lawrence is thus presented with “a dilemma”(346): should he “hit him and kill him and throw him away”(346), or does he have a duty to care for the bat? The poem continues:

Nay,
I didn't create him.
Let the God that created him be responsible for his death...
Only, in the bright day, I will not have this clot in my room.

Let the God who is maker of bats watch with them in their unclean
corners....
I admit a God in every crevice,
But not bats in my room;
Nor the God of bats, while the sun shines. (346)

Whereas in Lawrence's initial aesthetic judgement the bat is unclean because it reminds him of dirty rags, in this theological mode the bat is “impure” because it has another God. Presumably the bat is a good bat and is, to the God of bats, a pure bat. It is nevertheless, to Lawrence and his God, impure, unclean, and obscene. And yet, since “the human soul is fated to wide-eyed responsibility / In life”(347), Lawrence picks up the bat in a flannel jacket, and shakes the bat out of the window. This responsibility is not a choice, but the rule, the fate, of the human. While Lawrence decides to be responsible, he is still filled with disgust: “I would have had to kill him if he'd bitten me, the impure one”(347). If Lawrence were to kill the bat because of the aesthetic judgement that he passes on the bat, as something impure, then he would be guilty of bringing the under the sign of his own “God.” He would have reduced the bat to its anthropomorphized appearance in his perceptual world. However, if the bat were to attack him, he could kill the bat on its own terms. If the bat attacked Lawrence, the “God that created him” would “be responsible for his death.” The bat functions a limit to the human world, for the bat and the human have different “Gods.” At the same time, as long as the radical difference between the

human world and the bat's world is respected, Lawrence suggests that there is a mode of material interaction between him and the bat. It is only in overcoming this judgement that the bat is obscene that a mode of interaction between Lawrence and the bat is possible. This material interaction, beyond the terms of disgust and purity, becomes the logic of the universal flow.

The poem does not end with a congratulatory gesture towards human life and human responsibility, but with an attempt to speak the self-importance of the bat's world:

And now, at evening, as he flickers over the river
Dipping with petty triumphant flight, and tittering over the sun's departure,
I believe he chirps, pipistrello, seeing me here on this terrace writing:
There he sits, the long loud one!
But I am greater than he...
I escaped him.... (Poems, 347)

The limit to anthropocentrism can only be found by an articulation of the bat's world, a world in which the bat, not the human, is central. And yet this limit is articulated through anthropomorphic language, as Lawrence speaks of the bat's world in human terms, as egotistical and self-important, congratulating himself on his daring escape.

As the ethologist Jacob von Uexküll, whose work is roughly coincident with Lawrence's, writes, "a kind of megalomania has seized men, and they will no longer recognize limits to the possibility of knowledge. To the observer in the balloon this megalomania has something comical in it; human beings seem to him like flies gone so mad that they believe they can command a view of the entire universe and master it"(334). Uexküll himself loosely quotes Nietzsche's myth of humanity, where "once upon a time, in some out of the way corner of the universe which is dispersed into numberless twinkling solar systems, there was a star upon which clever beasts invented knowing":

That was the most arrogant and mendacious minute of "world history,"
but nevertheless, it was only a minute. After nature had drawn a few
breaths, the star cooled and congealed, and the clever beasts had to die.

One might invent such a fable, and yet he still would not have adequately illustrated how miserable, how shadowy and transient, how aimless and arbitrary the human intellect looks within nature. There were eternities during which it did not exist. And when it is all over with the human intellect, nothing would lead it beyond human life. Rather, it is human, and only its possessor takes it so solemnly—as though the world's axis turned within it. But if we could communicate with the gnat, we would learn that he likewise flies through the air with the same solemnity, that he feels the flying center of the universe within himself. There is nothing so reprehensible and unimportant in nature that it would not immediately swell up like a balloon at the slightest puff of this power of knowing. And just as every porter wants to have an admirer, so even the eyes of the universe telescopically focused upon his action and thought. (79)

Nietzsche's myth thus equates the arrogance of the intellect with the thermodynamic heat death of the universe—where “the star cooled and congealed.” Nietzsche suggests that even if we consider the human intellect as a momentary eruption within world history, we are unable to understand the “misery” of the intellect within nature. As Lawrence argues, the hubris that the intellect could understand world history itself, that it could impose its logic on nature, is equally “arrogant and mendacious.” There must therefore be another way to truly displace the arrogance of the intellect. Whereas for Uexküll or Nietzsche the idea of an egotistical animal registers the absurdity of epistemological certainty, for Lawrence the possibility that the animal is at the center of its own world suggests that the difference between the animal and the human is not so difficult to overcome. When Connie tries to explain to Hilda that “love can be wonderful: when you feel you *live*, and are in the very middle of creation”(251), Hilda responds by comparing Connie to just this parody of the self-important insect: “I suppose every mosquito feels the same”(251). Connie finds Hilda's reasoning impeccable: “Do you think it does? How nice for it!”(251). Rather than appeal to the mosquito as an example of hubris, the analogy between the human and the mosquito, for Connie, reveals an erotic truth.

If Lawrence writes a kind of metaphysical poetry, it is a metaphysical poetry after

Nietzsche, after Uexküll. In John Donne's "The Flea," the poetic importance of the flea is the erotic possibility it presents in the commingling of the poet and lover's blood.

Mark but this flea, and mark in this,
How little that which thou deniest me is;
It suck'd me first, and now sucks thee,
And in this flea our two bloods mingled be.
Thou know'st that this cannot be said
A sin, nor shame, nor loss of maidenhead;
Yet this enjoys before it woo,
And pamper'd swells with one blood made of two;
And this, alas! is more than we would do. (58)

In Lawrence's "The Mosquito," the blood-sucking mosquito is equally related to an erotics, but Lawrence's erotics emerges at an epistemological limit. While the mosquito is "Obscenely ecstasied" drinking the "Forbidden liquor" of "My blood"(333), Lawrence writes, addressing the mosquito, that "You don't know that I exist, and I don't know that you exist"(333). While Donne enjoins his addressee to spare the flea, and to thus have sex with him, Lawrence kills the mosquito. Yet it is in this moment of violence that a kind of erotic union takes place, for while neither Lawrence nor the mosquito knows that the other exists, at the bite, then slap, each enters into the other's world. As Lawrence writes, again addressing the mosquito, "Can I not overtake you? /... / Am I not mosquito enough to out-mosquito you?"(334). Where there is no shared world of knowledge, the mosquito and human are joined in interlocking worlds of action, worlds in which each has an overdetermined relationship to the other. On the one hand Lawrence kills the mosquito because of its "obscene enjoyment" of his blood. Yet at the same time, in becoming "mosquito enough" to intervene in the mosquito's world, Lawrence himself participates in an "obscene enjoyment" of the mosquito's blood. Likewise, when Lawrence saves the bat that is trapped in his room, it is part of his moral duty as a human. But if the bat had bitten him, he would have been not just justified, but required, to kill the bat. It is only the hubris

of knowledge that would allow the human to kill the animal because of its obscenity; it is an animal reaction that allows the human to partake of this obscenity. The only way to think a shared world of action, in which the roles of “man” and “woman,” as well as “bat” or “mosquito” determine action without necessitating an appeal to a uniform epistemological space, is by theorizing a transcendental ground for each subject.

The fact that each animal lives in a mutually exclusive world defined by the centrality of its own God initially suggests that Lawrence substitutes a kind of multi-species polytheism—where the human has a human-God, the bat has a bat-God, and the mosquito has a mosquito-God—for Christian monotheism. It is in this polytheistic world that the animal other is figured as impure or obscene. A second theological gambit lies in Lawrence's effort to think the material relations between these different worlds, governed by different Gods. The question of these material interactions returns to the problem that Lawrence notes in Einstein's theory of relativity—that of how to think a world comprised of relative relationships without proposing a uniform language into which all these relationships are translated.

Lawrence's suspicion is that while relativity opens up the possibility of considering life and beings as immanently organized, the fact that these relations are mathematized suggests a retreat from the close consideration of the real relations that persist between phenomena. Ian Hacking makes the same observation when he writes that “relativity was often presented in its day as a refutation of Kant's transcendental aesthetic”(38). Yet if, as Hacking continues, relativity was a refutation of the uniformity of space and time assumed in vulgar Kantian science, it was equally “an utterly Kantian moment in the philosophy of science” in that “the conception of physical science as unstable, as a matter of refutation and revolution, went in hand with a total lack of interest in the role of experimental science”(38). Uexküll, whose close studies of the

animal world attempted to examine animal behaviour without assuming that his animal subject's live in a human world, is one notable exception to this trend. As Giorgio Agamben writes, “Uexküll’s investigations into the animal environment are contemporary with both quantum physics and the artistic avant-gardes. And like them, they express the unreserved abandonment of every anthropocentric perspective in the life sciences and the radical dehumanization of the image of nature”(39). I want to suggest that Uexküll's theorization of the animal—which, like Lawrence's vision of “a God in every crevice”(346) argues that the condition of a deanthropomorphized animality is the articulation of a transcendental factor that conditions each animal's subjective world—clarifies the theoretical stakes of Lawrence's animals.

As for Lawrence, Uexküll's fundamental gesture is one of opposition to nineteenth century mechanistic energetics. Uexküll begins his *Theoretical Biology*, in which he provides the theoretical basis for his in-depth studies of the subjective worlds of animals, by orienting both his technique and metaphysics in opposition to Hermann von Helmholtz. Uexküll writes that while Helmholtz “indeed acknowledged that all objects must appear different to each subject...he was seeking the reality behind appearances. Many have done this before him: but he differed from his predecessors in supposing that what lies behind appearance is not the “Weltgeist,” but the physical laws of the universe”(xv). Uexküll suggests that Helmholtz tries to step beyond the world of appearance, by proposing a mathematically governed logic of the real.

Against Helmholtz's hypothesis that there are objective laws that govern the universe, Uexküll proposes that knowledge must proceed through the study of the subject. “No attempt to discover the reality behind the world of appearance, i.e. by neglecting the subject, has ever come to anything, because the subject plays the decisive rôle in constructing the world of experience, and on the far side of that world there is no world at all.” As Uexküll continues, “All reality is

subjective appearance. This must constitute the great, fundamental admission even of biology. It is utterly vain to go seeking through the world for causes that are independent of the subject; we always come up against objects, which owe their construction to the subject”(xv). For Uexküll this is a fundamentally Kantian project:

When we admit that objects are appearances that owe their construction to a subject, we tread on firm and ancient ground, especially prepared by Kant to bear the edifice of the whole of natural science. Kant set the subject, man, over against objects, and discovered the fundamental principles to which objects are built up by our mind. (xv)

Thus, “the task of biology consists in expanding in two directions the results of Kant’s investigations:—(1) by considering the part played by our body, and especially by our sense-organs and the central nervous system, and (2) by studying the relations of other subjects (animals) to objects”(xv). Ethology, that is, is the study of what each animal constructs as its subjective spatial and temporal world. The curiosity is that if we read Uexküll against a Kantian transcendental aesthetics that assumes a natural world of uniform space and time, then we must explain what it means that Uexküll understands his project as the experimental completion of a Kantian project. A partial response comes in the fact that whereas Helmholtz grounds science in a naturalized transcendental aesthetic, Uexküll grounds biology in Kant's ethics.

Uexküll understood the development of the organism in terms of Mendelian genetics, and wrote in staunch opposition to Darwinian evolution. As Richard Dawkins writes, before the synthesis of genetics and natural selection, the mechanism of evolution remained largely inexplicable.

It is hard to overstate the fact that Darwin’s genetics were pre-Mendelian. The intuitively plausible blending inheritance theory of his time was not just wrong, it was grievously wrong and especially grievous for natural selection. Darwinism's incompatibility with blending inheritance was pointed out in a hostile review of the *Origin* by the Scottish engineer Fleeming Jenkin. Variation tends to disappear with every blending

generation, leaving not enough for natural selection to get its teeth into. What Jenkin should have realized is that blending inheritance is incompatible not just with Darwinian theory but with obvious fact. If it were really true that variation disappeared, every generation should be more uniform than the previous one. By now, all individuals should be as indistinguishable as clones. (67)

While Uexküll would have had good reasons to argue against the logic of natural selection, his critique proceeds on more firmly philosophical grounds. He argues that since time and space exist as the subjective conditions of experience, and since different organisms experience time and space differently, it is strictly nonsense to think that the evolution of the organism is a response to the objective spacial and temporal conditions of its environment. Since space and time are produced by the subject, then there must be something in the organism that is outside of space and time. Uexküll finds this extra-spacial and extra-temporal cause in Mendelian genetics, which, “when understood in its full significance, refutes any mechanical explanation of the developmental process”(198). Uexküll thus argues that the spacial and temporal body of the animal emerges as the effect of “impulses” that proceed from the genes. He writes: “We may say that the genes are “impulsive,” but by that term we must not presume a physical energy, following the rule of causality; rather, we must understand the power to covert an extra-spatial and extra-temporal plan into a physical phenomenon”(216). Uexküll calls the animal's body the “framework” of the animal. The development of the animal thus consists in the spacialization and temporalization of this plan, in the production of the animal's “framework.”

What the subject gains in shape it loses in fresh life-possibilities. Thus the framework slowly increases in complexity and solidity but it becomes more and more like a machine, and loses one super-mechanical power after the other, until finally there is left in each cell only a remnant of the protoplasm containing the genes that serve for the necessary repairs. The framework restricts framework-formation. (216)

The animal body, which includes the sensory apparatus through which the animal constructs the

objects of its worlds, is produced by a super-mechanical power that resides in the genes.

Since the formed animal functions according to the same physical laws that would govern the functioning of a machine, it is only this framework-forming force, which resides in the protoplasm of the cell, that distinguishes an animal from a machine: the animal, unlike a machine, can change its form, and repair itself when it is damaged. Accordingly, when Uexküll speaks of the subject, he does not refer to the actual animal, but to the extra-spatial and extra-temporal law that guides the development of the animal. The subject follows a law that is not reducible to the environmental forces at work on the organism. As Uexküll writes, “all subjects have a rule of function of their own, which expresses itself not only in the framework, given once and for all, and in the activity thereof, but which also is able to repair all framework within certain limits; consequently, this rule represents a natural factor that is continually operative”(353). Uexküll thus distinguishes between the animal as the body that is the object of scientific discourse, and the animal as the subject that is, by definition, excluded from mechanical scientific discourse. The “rule of function” is, as Uexküll writes, the transcendental condition of the material development of the organism. It is in an attempt to theorize the relationship of this transcendental condition to the material body of the organism that Uexküll turns to Kant's ethics.

The manner in which the specific energies are associated dispenses with mechanical compulsion, but is, in its nature, an imperative. All living beings develop, not in accordance with a causal “thou must,” as is characteristic of the unorganized forces, but according to a biological “thou shalt.”

“As we know, since Kant’s day the ethical command “thou shalt” is referred to a transcendental influence on the empirical character of the human being, and the empirical character of the human being, with a “thou must,” forces the decision.

On this analogy, we may describe all actions of the body as “thou must,” so long as they are based on the compulsion of the developed biological organization, and all super-mechanical invasions as a “thou

shalt,” proceeding from the impulse-system.

This way of considering things permits us to say of the impulse-systems that they are “imperative” in respect of form, which they always relate to the development or maintenance of the individual. This individual is always a subject, because it always forms a new world-centre. Everything that happens, happens for the individual only in so far as the phenomenon becomes a new indication within it. The indications are, so to speak, the lighthouses of the individual, from which it gets glimpses of the world. Each individual has only so much world as is subjectively accessible to it. (353-4)

The empirical world of the animal is produced through “super-mechanical invasions,” on the model of Kant's categorical imperative, that form and revise the physical existence of the animal. For Uexküll the possibility of a subjective science, of an ethological study that enters into the animal's subjective world, depends upon the theoretical articulation of a transcendental condition—on the analogy of the Kantian ethical imperative—through which the animal, as a “law unto itself” produces the world within which it lives. While all animals do not share a single imaginary world, organized by a single transcendental factor, each animal lives in a specific imaginary world, organised by a specific transcendental factor. Just as for Lawrence, Uexküll suggest that each animal has its “own God.”

For Uexküll this transcendental factor functions not only to produce the animal's physical body, and sensory apparatus, but also to coordinate the animal with the external world in which it lives. The animal lives in absolute congruence with its environment, because the animal never encounters an object that is outside of its world. Uexküll proposes that we can conceive of the animal's relationship to its world by imagining that the animal moves through the world just as a ball of food moves through the digestive tract: “the animal corresponds to the food-ball, and the alimentary canal to the surrounding-world”(307). Only whereas in the case of the ball of food moving through the digestive system, the ball of food is moved forward through the peristaltic action of the intestines, in the case of the animal moving through its world, the animal's motion

produces the tunnel through which it moves. “If we follow the track of some selected animal, we can re-create its surrounding-world around that track, by setting up again the indicators with which it came into contact. The surrounding-world of the animal thus becomes a tunnel”(307). As Uexküll writes, “the life-path of an animal, which we may imagine as a tunnel of indications holds only such things as exist through their relations to the animal—those and no others. If we wish to enter into the life-path of an earthworm, for instance, we must not forget that it is composed of earthworm things, and of nothing else”(307).

While the animal produces the “indication tunnel” through which it moves, the “function circle” is formed of elements that are independent of the animal. As the animal advances through its tunnel-like surrounding world, “each forward movement causes an indicator to disappear and a new one to arise (306). At each movement, a new “function-circle”(306) begins, in that the animal is engaged with a new element of the external world. “The course of the function in each new circle means a new action, and so here also one action connects up with the others into a chain, which winds itself through the whole life”(306). At the same time that the animal carves out a tunnel from the external world, “the rhythmic sequence of the function-circles [...] is a creation of the external world, because the order in which the indicators appear depends on associations that are independent of the animal”(306). Uexküll's example of the earthworm is, of course, fortuitous. The earthworm moves through peristalsis, producing a tunnel as its surrounding world. While this world is an earthworm's world, it is built out of the external world. The specific density of the soil, its level of acidity, and the quantity of oxygen within correspond perfectly to the earthworm's needs. This suggests to Uexküll that there is a perfect correspondence between the rhythms of the animal, and the rhythms of the external world.

In terms of human thought, the inner rhythm of the animal knows the laws of the outer world, although the animal gets no information thereon through the indications at its disposal. It is this knowledge possessed by the inner rhythm that I have called the “wisdom” of organisms. Of course, there is no question here of knowledge, or wisdom in the human sense, but of a “congruity” of the internal processes of the animal with the laws of the external world. (310)

The same super-mechanical force that exists in the protoplasm of the animal ensures that the animal selects an external world whose rhythms are in perfect congruity with the internal rhythms of the animal. When this congruity—generated by the super-mechanical forces—is taken into consideration, “the paltry analogy with the human way of doing things collapses into nothing, and we stand face to face with a real law of Nature, as free from exceptions as is the law of gravity”(315). The extra-spacial, extra-temporal force shows that something in “the organism, in the species and in the community as well as in the individual [...] lies in the hands of a super-mechanical natural power, which is to be recognized not through rules, but itself acts according to rules”(318). The laws of nature that form the animal, and that relate the animal to the world, are irreducible to mechanical law, just because it is the supra-mechanical force that produces law. It cannot be understood as a codified empirical law, because it is prior to, and productive of, the law governed field of empirical reality.

While Uexküll's ethological studies have had an important influence on twentieth century thought, his notion of a law of nature that ensures the congruity of animal and world now seems an embarrassing idiosyncrasy. Brett Buchanan writes, in his study of Uexküll, that Uexküll's refusal of Darwinism, and subsequent appeal to the “plan” that ensures congruity “could be the result of having misunderstood Darwin's ideas”(18). Indeed, the problems that troubled Uexküll have been largely solved through modern evolutionary biology, which, from the 1930's on, synthesized Mendelian genetics and Darwinian evolution. The extra-spacial and extra-temporal

plan has been located, in a matter of speaking, in the codes of DNA and RNA, and the congruence between animal and environment has been explained through a theory of adaptation that works not on the animal, but on specific genes. However, as I've suggested, Uexküll's appeal to the "plan" and refusal of Darwinian selection is not a mere case of misreading.

Buchanan argues that for Uexküll "the meaning of biology as a 'theory of life' is to discover how meaning is generated through relationships. One may be even tempted to say that, in order to know a living being, one must know the relations it is capable of forming; an animal is no more than its relations"(30). Buchanan suggests that the definition of the animal as the relations that it is capable of forming is central to Deleuze and Guattari's appropriation of Uexküll. For Deleuze and Guattari, writes Buchanan, "the main issue [...] falls on the nature of relations, but in such a way that they question the very meaning of the concept 'body' and 'organism.' They find life to be a play of differential relations that form brief assemblages, where animal life is no longer akin to a sphere but punctuated lines of flight"(38). As Pater argues that "that clear, perpetual outline of face and limb is but an image of ours, under which we group them—a design in a web, the actual threads pass beyond it"(The Renaissance, 150), and Lawrence argues that the human exists only exists as a node within a flow of energy, the living body appears as intersection of forces. Deleuze and Guattari write that "Von Uexküll, in defining animal worlds, looks for the active and passive affects of which the animal is capable in the individuated assemblage of which it is a part"(ATP, 283).

For example, the tick, attracted by the light, hoists itself to the tip of a branch; it is sensitive to the smell of mammals, and lets itself fall when one passes beneath the branch; it digs into its skin, at the least hairy place it can find. Just three affects; the rest of the time the tick sleeps, sometimes for years on end, indifferent to all that goes on in the immense forest. Its degree of power is indeed bounded by two limits: the optimal limit of the feast after which it dies, and the pessimal limit of the fast as it

waits. It will be said that the tick's three affects assume generic and specific characteristics, organs and functions, legs and snout. This is true from the standpoint of physiology, but not from the standpoint of Ethics. Quite the contrary, in Ethics the organic characteristics derive from longitude and its relations, from latitude and its degrees. We know nothing about a body until we know what it can do, in other words, what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body, either to destroy that body or to be destroyed by it, either to exchange actions and passions with it or to join with it in composing a more powerful body. (*ATP*, 283-4)

Deleuze and Guattari shift the focus from Uexküll's theorization of a transcendental factor—modeled on Kant's ethics—that conditions the animal's material body and coordinates the rhythms of the body with the rhythms of the external world, to the network relations that situate bodies in their milieus. In their Spinozist appropriation of Uexküll, the emphasis is no longer on the relation of the animal to its “surrounding world”—what they call the animal's “individuated assemblage”—but rather on the interactions between various milieus, on the ways with which bodies cross worlds, interact in unexpected ways, and enter into new, deterritorialized, assemblages.

It would seem that Lawrence occupies a position between Uexküll and Deleuze. Lawrence, like Uexküll, continually emphasizes that each animal's world is organized around a transcendental factor—its “God.” And yet at the same time, in the mode of Deleuze and Guattari's interest in the interaction between bodies that belong to different milieus, Lawrence is interested in the material interactions that occur between different milieus, in the often violent contact between bodies that occurs outside of what either body knows of the other. In these moments—the confrontation with the bat, or the slap that kills the mosquito—Lawrence shifts his focus from the observation of an epistemological limit, to a physical interaction of bodies that oversteps this limit. Lawrence's “flow” becomes the name for these material interactions between different milieus.

Whereas Deleuze and Guattari wish to strip the transcendental from Uexküll's theory of nature, for Lacan, it is just this transcendental factor that establishes the scene of natural meaning. Lacan suggests that it is through, not despite, Uexküll's appeal to Kant's ethics that Uexküll illuminates something about how the human can think the natural world. In Uexküll's Kantian language, the animal's world is entirely determined by a transcendental factor. The “law of nature” that, on the model of Kant's categorical imperative, is not an element of empirical reality—and thus constrained by causal laws—determines the animal according to a non-causal, biological imperative. Not only is the animal's world in perfect congruence with the external world, but the animal is in absolute congruence with the non-causal “law of nature.” The animal is not determined by its environment, for its will is entirely subservient to the law of nature. In Kantian terms, the animal is free, in that it is not determined by the law of cause and effect that governs the empirical world.

And yet for Kant, the idea of an absolute congruency between the categorical imperative and the will must be relegated to an infinite horizon. It is for this reason that Kant argues that the immortal soul is a postulate of practical reason. Because a complete adequacy between the categorical imperative and the will can never be achieved, the immortal soul must be posited as a support to an infinite labor. The immortal soul can be assumed because it must “be just as possible as its object”—the labor to become adequate to the moral imperative—“because it is contained in the same command to further this object”(155). As Kant continues “this adequacy is nonetheless demanded as practically necessary, it can be encountered only in a progression proceeding *ad infinitum* toward that complete adequacy; and according to principles of pure practical reason it is necessary to assume such a practical advance as the real object of our will”(155). The labor of the Kantian ethical subject, who is eternally split between pathological

determination—the subject's response to causal, empirical reality—and the moral law, is sustained by hope that in the infinite time available to the immortal soul this adequacy will be realized.

When Lacan reads Kant's ethics through the Marquis de Sade's *Philosophy in the Bedroom*, he argues that Sade substitutes the law of Nature for the Kantian moral law. In his reading, Lacan foregrounds the importance of this irresolvable split between the pathological and moral subject. As Serge André writes, in his explication of Lacan's *Écrit*, “Kant With Sade” the Sadian antihero

makes himself, in effect, the instrument or the voice of a will towards absolute jouissance (V), that Natural Law which...for Sade, is a substitute for the Kantian moral law. From there, he addresses his victim, to whom is left all the weight of subjectivity, and profoundly divides him between submission to the voice of the imperative and a revolt against pain (\$), just until the point that the victim faints. (26)

André continues that “this manoeuvre of the Sadian master aims at producing a mythical subject, that is never achieved, neither by him, nor by the victim: a “pure subject of pleasure”(26). In Lacan's reading, both Kant and Sade work to follow the impossible demand of the moral imperative, in order to move towards a complete adequacy with this imperative. Just as, for Kant, there can only be an asymptotic approach to this adequacy, André argues that for Sade, the “pure subject of pleasure” remains a myth. While the Sadian master aims at what Uexküll describes as the perfect congruence between the subject and the natural law, Uexküll argues that the animal, wholly determined by the laws of nature, is the pure, undivided subject.

In a passage from his early and well-known *Écrit* “The Mirror Stage as Formative of the I Function,” Lacan appeals to Uexküll in order to analyze the function of the image on the development of the organism. “The fact that a gestalt may have formative effects on an

organism is attested to by a biological experiment” that shows that “it is a necessary condition for the maturation of the female pigeon's gonad that the pigeon see another member of its species.” “Similarly” writes Lacan, “in the case of the migratory locust, the shift within a family line from the solitary to the gregarious form can be brought about by exposing an individual, at a certain stage of its development, to the exclusively visual action of an image akin to its own”(Écrits, 77). Each of these is a “particular case of the function of imagos, which is to say a relationship between an organism and its reality—or, as they say, between the *Innenwelt* and the *Umwelt*”(Écrits, 78). In appealing to Uexküll terminology—for Uexküll the *Umwelt* is the animal's exterior world while the *Innenwelt* is the animal's interior world—Lacan underlines the fact that the imago must be considered as part of the organism. Lacan makes this point in a later seminar when he writes that for an animal the sign has a “captivating valence due to which its receiver, who sees the red of the robin redbreast for instance, and who is made for receiving it, undertakes a series of actions or henceforth unitary behaviour that links the bearer of this sign to its perceiver. Here you have what gives us a precise idea of what may be called natural meaning”(Seminar III, 167). Since for the robin, Lacan writes, the red coloring “corresponds to the guarding of the limit of its territory and the encounter alone occasions a certain form of behaviour towards its adversary”(Seminar III, 9), the red has an “imaginary function” in that “this red will have made him see red and seemed to him to bear within it the expressive and immediate character of hostility or anger”(Seminar III, 10). The animal, as in Uexküll's description of the congruence between the animal and world, responds without hesitation to the image. It is this intimate linking of the animal to the image that allows Lacan to write that “the imaginary is surely the guide to life for the whole animal domain”(Seminar III, 9).

Although Lacan appeals to the function of the image in the animal domain in his essay on

the mirror stage, there is an important difference between the logic of the image for the human and the animal. Lacan notes that the child, who is born helpless and “premature”(*Écrits*, 77) lacks the ability exert muscular control over his disorganized body. The child first comes into possession of his body when he identifies not with the experience of this disorganized body, but with the unified body, in the mirror, that he sees his mother looking at. The child who passes through the mirror stage exchanges the subjective experience of his disorganized body for the unified, organized, but ultimately alien image that he sees in the mirror. The mother's gaze serves as the transcendental support for the empirical world, as it “situates the agency known as the ego, prior to its social determination, in a fictional direction that will forever remain irreducible for any single individual”(76). The relationship between the disorganized body of the drive and the image will remain as the subject's “discordance with his own reality”(76). Whereas the animal lives in a world that has a dyadic structure, the human lives in world with a triadic structure. While the animal lives in a world of images that is fundamentally aligned with its subjective existence, the human lives in a world of images—first supported by the mother's gaze—that is fundamentally at odds with subjective experience.

Whereas for the human the formlessness of the disorganized body remains in conflict with the ordered world of images, the animal lives in a world of forms that is produced by the “super-mechanical invasions” of an “imperative” into the empirical world. Lacan evokes the tension between these positions when he asks what “one might desire of one's own body.” He responds that one might dream “of a total, complete, epidermic contact between one's body and a world that was itself open and quivering; dream of a contact and, in the distance, of a way of life that the poet points out to us; hope for a revelation of harmony following the disappearance of the perpetual, insinuating presence of the oppressive feeling of some original curse”(*Seminar XI*,

93). If the original curse is the falsification of the subjects experience by a world of fundamentally alien images, then the dream of epidermal contact is a fantasy of an animal relationship to the imago, the fantasy of a world of images fundamentally aligned with subjective experience.

When Ursula and Skrebensky “put off their puppet form”(436) and discover, beyond the “material world”(427) a “new world”(426) of “primeval darkness” that is “falsified to a social mechanism”(434), Lawrence would seem to return to a version of Lacan's mirror stage in which the world is built out of the subject. Ursula refuses the mechanical world of falsified forms, and lingers in the unknowable rhythms and patterns of the universal flow. “She was free as a leopard that sends up its raucous cry in the night. She had the potent, dark stream of her own blood, she had had the glimmering core of fecundity, she had her mate, her complement, her sharer in fruition. So, she had all, everything”(434). Momentarily, the “irreducible” tension between the image, and the body it falsifies, seems to be overcome, as Ursula becomes a “dark, vital self.” As in Uexküll's theorization of the animal, or Sade's labor to produce an undivided subject where the “law of nature” overcomes the resistance of empirical reality, Ursula takes part in a natural logic in which a world constructed out of subjective experience takes the place of alienating social structures.

Eventually, however, the social world descends upon her. After her traumatic break-up, and Skrebensky's surprising marriage to another, she “gasped and groped to find the creation of the living God, instead of the old, hard barren form of bygone living [...]. Sometimes she lost touch, she lost her feeling, she could only know the old horror of the husk which bound in her and all mankind. They were all in prison, they were all going mad”(480). While, in the ecstasy of love the subject and world coincide without mediation, the world of falsified images and

social forms intervenes. Ursula is imprisoned as her true body is falsified by the fictional determination of her social self. As Ursula watches a rainbow form in the final lines of the novel, she waits for this revelation of harmony in which the world will be “built up in a living fabric of Truth, fitting to the over-arching heaven”(481). Ursula's hope is that the corrupt world, the prison of falsified images, will give way to a harmony between subject and world. Ursula's failure becomes the hope of a new world. The chapter in which Ursula experiences both this transformative harmony between her body and the world and her exclusion from this harmony is entitled “The Bitterness of Ecstasy.” It is only, Lawrence suggests, through the admission of a certain lack, that the hope of a harmony between subject and world arrives. While ecstasy is bitter because of its failure, the bitterness of failure itself opens to ecstasy. It is only because each subjective being, determined by its own transcendental god, is wholly other than each other being, that all beings share a world of material relations, beyond the limits of knowledge. It is only because of a lack in knowledge that there exists a transformative world beyond knowledge.

Through his animals, which are figured as both a limit to the human, and as a marker of the human's potential to overcome a limit, Lawrence appropriates the fact of the limited human, excluded from animal being, as evidence that the human is part of animal being. In Lawrence's poem, “Fish,” the animal serves first to articulate the limited epistemological world of the human, and possibility of a participation in nature. Fish, Lawrence writes, have “One touch. No fingers, no hands and feet, no lips; / No tender muzzles, / No wistful bellies, / No loins of desire, / None”(335). Despite this difference, Lawrence momentarily identifies with, the fish. Yet he soon realizes that “I had made a mistake, I didn't know him, / This grey, monotonous soul in the water”(336). “Fish are beyond me” he continues, “I am not the measure of creation. / This is beyond me, this fish. / His God stands outside my God”(339). Yet while his experience of this

fish reveals what seems like an unbridgeable chasm between subjective worlds, the solitude of each fish becomes an analogue for the gulf that both separates the speaker from the fish, and each human from his fellow. Each fish lives a lonely existence. “Admitted, they swarm in companies, / Fishes. / They drive in shoals. / But soundless, and out of contact. / They exchange no word, no spasm, not even anger. / Not one touch. / Many suspended together, forever apart, / Each one alone with the waters, upon one wave with the rest”(337). And yet, there is “A magnetism in the water between them”(337). The solitary relationship of each fish to the next opens to the trans-subjective flow of a magnetic force that unites them, analogous to the electrical and magnetic force that unites humans in a trans-subjective flow. A mode of human experience that is phenomenologically equivalent to the silent communion of fish emerges as a poetic ideal.

Lawrence ends not with the articulation of the limited worlds of fish and humans, but with a theological gesture. After offering his attempt to understand the fish Lawrence concludes:

*But I, I only wonder
And don't know
I don't know fishes*

*In the beginning
Jesus was called The Fish....
And in the end. (340)*

Sandra Gilbert writes the fish exemplifies a “self-contained blood-being [...] beyond or beneath the double experience of the human being who so irrevocably exists both within and without himself”(171). At the same time that the fish is self-contained, the pairing of Jesus with the fish suggests that the fish is, itself, doubled. On the one hand the pairing of Jesus and the fish appropriates the fish as a symbol for human participation in the natural world, through the electromagnetic waves and flows that unite all life. On the other, the fish reveals that there is no

“One God”: Jesus becomes a placeholder for this experience of the limited human subject who faces the alien world of natural being. It is only, Lawrence suggests, through dispossession, through lack and castration, that the human can gain entrance into the unified world of animal being.

Lawrence's retelling of the resurrection of Jesus, *The Man Who Died*, presents the same narrative of lack transformed into excess. The novella, which was originally entitled *The Escaped Cock*, begins not with Jesus's resurrection, but with “a peasant near Jerusalem who acquired a young gamecock”(163). The young cock grows into a “certain splendour”(163). By “some freak of destiny, he was a dandy rooster, in that dirty little yard with three patchy hens”(163). Though he is kept in walled yard, he “gave shrill answers to the crowing of other cocks, beyond the wells, in a world he knew nothing of”(163). The peasant, worried that the cock will one day fly away, tie a cord around his leg, “and he grew, with a gloomy, foreboding kind of knowledge, that he was tied by the leg”(164). The same day that Jesus emerges from his tomb, the cock, “with a sudden wave of strength”(164), breaks the cord that had held him in place. As Jesus stumbled down the road, newly awoken from death, and filled with pain and revulsion at the world, “in a kind of half-consciousness...he was roused by the shrill wild crowing of a cock just near him, a sound which made him shiver as if electricity had touched him”(167). Jesus buys the cock from the peasant, and sets off into the world. “He carried the cock, whose tail fluttered gaily behind, and who craned his head excitedly, for he too was adventuring out for the first time into the wider phenomenal world, which is the stirring of the body of cocks also”(181). While Jesus is apart from the world, aloof and virginal, the cock is “hot...with life”(182). Jesus thus turns away from the transcendence of the father, towards the cock that “is full of life and virtue”(183).

Late in the novella, Jesus is recognized by Isis as Osiris. She repairs his wounds and scars, and then they have sex. “'Father!' he said, 'why did you hide this from me?' And he touched her with the poignancy of wonder, and the marvellous piercing transcendence of desire”(207). Jesus / Osiris impregnates Isis, and leaves to journey through the world. Jesus, who had distained physical life, learns to be part of the physical world, of the “flow onwards,” and thus achieves a material resurrection. As Jesus / Osiris leaves Isis, Lawrence writes that “The man who had died rowed slowly on, with the current, and laughed to himself: “I have sowed the seed of my life and my resurrection, and put my touch forever upon the choice women of this day, and I carry her perfume in my flesh like essence of roses”(211). Jesus trades the death-like transcendence of the father—a transcendence of the flesh—for the “piercing transcendence of desire”(207), a seemingly contradictory transcendence in the flesh.

One curiosity of the novella is Lawrence's literalization of the myth of Osiris and Isis, in which Isis reassembles the dismembered Osiris, but is unable to find his penis, and therefore builds him a new phallus. Lawrence's Jesus is, like the reassembled Osiris, sex-less, and the sexual energy he finds is in the gamecock that teaches him life and sexual desire. This is, in effect, the same manoeuvre from the final pages of *Lady Chatterley's Lover*, where Mellors' penis, which is “more cocky”(218) than Mellors, and which “has a will of his own”(219), is rhetorically detached from Mellors' body. If the human, as Lawrence insists, is built around a “void and hollow want” then for both Mellors and Jesus / Osiris the void is given form as a detached phallus. The castrated Jesus / Osiris becomes a signifier for the hole in human knowledge that opens to the plenitude of the material world, to those infinite rhythms of material exchanges. Jesus, in other words, is castrated by the life that resides beyond him, compared to which he is lacking. The phallus that he lacks, however, exists in the natural world. It is only

through castration—the discovery that knowledge is limited, and that he does not possess, but is rather subject to the phallus—that Jesus is able to participate in the universal flow. Jesus's castration becomes a signifier for both the limited world of the human, and for the unlimited flow of primary nature.

In his ontology of the flow the human is connected to the universe “in rhythms too big and too small for us to know”(*Poems*, 479). While life is punctuated with moments of ecstatic participation in this flow, it is equally the experience of “darkness and corrosive death”(*Women*, 358), or of the “void” of unsatisfiable desire that opens like a “bottomless pit”(*Crown*, 4). Lawrence's gambit is that these experiences of lack and loss can be refigured as evidence of the plenitude of the universal flow that moves through the cosmos. Rather than imagine that the human is separate from vital being because of language or culture, Lawrence suggests that the plenitude of the natural world, itself, introduces lack into the human. The human is incomplete just because the human is a structural element in a flow that extends beyond knowledge and experience. This scene of natural meaning not only establishes the flow as the beyond of the social world, but appropriates the failures of the social world as its material support. Gudrun's horror at the “awful, inhuman distance which would always be interposed between her and the other being!”(*Women*, 360), or Lawrence's description of Clifford Chatterley's subjective life as unstructured “pulp”(112), are not just places where the logic of the flow fails, but the means by which a lack is produced which, when taken up as an element in the universal flow, becomes the substance of Lawrence's vital unconscious.

Thermodynamics and the Unconscious

In Freud's thermodynamic picture of the brain the unconscious is a system of repressed and unknown associations that intervene between phenomenal experience and the subject's affective response to this experience. In neurotic or hysteric patients, phenomena that should not elicit an emotional response has an effect, because of repressed, and unconscious, associations. While the deviations of energy, introduced by these unconscious associations within the neural system remain to be fully elaborated, the unconscious is, for Freud, the kind of thing that can be given a thermodynamic explanation. In his reading of Freud, Lacan insists on both the importance of scientific energetics for the development of psychoanalysis, and on the fact that the unconscious has nothing to do with energy. Lacan thus distinguishes between two problems in Freud's thought. On the one hand Freud gives a full thermodynamic explanation for the unconscious deviations between sensory experience and affective response, appealing to scientific discourse as a given and stable structure through which reality can be apprehended. On the other hand, because of his allegiance to a tradition of English empiricist thought, Freud must account for the persistence of the external world as the kind of thing that would merit an affective response.

Whereas the strange Kantian legacy in England used the division between primary and secondary nature to distinguish between human perception and the 'Unknown Absolute' that is the external world, and while for a true Kantian—like Helmholtz—the existence of the external world is not a problem, but rather a question of the *a priori* forms of the intuitions, for Freud, because of his allegiance to English empiricism, the existence of the external world must be accounted for. Whereas thermodynamic thought tries to do away with the problem of why the

external world appears as coherent and consistent by assuming that the external world has an internal mathematical logic, Lacan foregrounds this empiricist problem, suggesting that the question of why the world coheres as a thing—as a *Ding*—must remain a central preoccupation of psychoanalysis.

To trace this problem through Lacan's thought I turn to Lacan's reading of Ludwig Wittgenstein's *Tractatus Logico-Philosophicus*, where Wittgenstein proposes that logic is the transcendental structure of both language and world. Wittgenstein derives his correspondence theory from Heinrich Hertz's 1893 *The Principles of Mechanics*, which attempts to explain how the mathematical language of thermodynamics—the same language that Freud appeals to as the basis of a scientific psychology—relates to physical reality. Both Lacan and the late Wittgenstein—who offered a critique of the logicism of the *Tractatus* in his later writings—turn their inquiries to the question of where this fantasy of a metalanguage, of logic as the beyond-of-the-signified, comes from, and of why this fantasy troubles language. Whereas Freud's thermodynamic unconscious is the neurally embedded reaction to the desired object, Lacan will suggest that the unconscious is the confrontation with the question of *why* objects of desire seem to inhabit the world.

I. Energy and the Unconscious

The ambitious goal of Freud's *Project for a Scientific Psychology* is to provide a full thermodynamic explanation of human psychology. As Freud begins, “the intention of this project is to furnish us with a psychology which shall be a natural science: its aim, that is, is to represent psychical processes as quantitatively determined states of specifiable material particles

and so to make them plain and void of contradiction” (355). Freud continues that “the material particles in question are the neurons” (355), and that these neurons are invested with a quantity of energy. The flow of energy through these neurons are guided by a principle of “neural inertia,” modeled after the principle of conservation of energy, that dictates that neurons divest themselves of energy—by passing it on to the next neuron—in order to return to a position of equilibrium. The entire neural system, governed by this principle, works to divest itself of the quantities of energy that enter into the system through the form of external stimuli, in order to maintain a state of equilibrium.

Freud returns to the question of metapsychology at various points throughout his writings—notably in Chapter VII of *The Interpretation of Dreams*, *Beyond the Pleasure Principle*, *The Ego and the Id*, and *An Outline of Psychoanalysis*—but the basic premise of this metapsychology, that the unconscious emerges as an effect of structured exchanges of neural energies, governed by a principle of equilibrium, remains essentially unchanged. While Freud continually revised his psychoanalytic terminology—from the language of primary and secondary processes to the language of the ego, id, and superego, from the pleasure principle and the instincts to the death drive—he consistently understood these processes in terms of a thermodynamically regulated system of energy.

Patricia Kitcher thus distinguishes between Freud's “doctrines” and his “metatheoretical directives” (*Freud's Dream*, 44).

The distinction between doctrine and directive can be fairly clearly seen in other scientific programs. In Newtonian mechanics, for example, substantive claims such as the laws of motion emerged from a program guided by the metatheoretic principle that the behavior of any physical object should be explained by determining the forces operating on it. Evolutionary biology tries to explain the characteristics of organisms on the assumption that all such accounts must involve the modification of features found in ancestral populations. Applying the distinction to the puzzle about

metapsychology, what Freud continued to support were the metatheoretic directives embodied in his metapsychology. The ideal of psychoanalysis was always to construct complete theories of mental phenomena that captured their dynamic, economic, and topographic dimensions. By contrast, Freud was willing—at least in theory—to modify or cast aside substantive metapsychological claims such as the pleasure principle and the theory of instincts. (44)

While Freud's substantive theories continue to evolve, the dynamic and economic topography he first puts forward in the *Project* remains constant through his work.

The scientific understanding of the biology of the brain has gained an astonishing level of specificity over the last hundred and fifty years. Late nineteenth century biology was, however, astonishingly advanced. Lewellys Barker's 1899 *The Nervous System*, for example, explores the connections between distinct neural clusters in with the same premise that guides contemporary understandings of neurobiology, understanding the brain as a system of connections through which energy, in the form of electrical impulses, flows, governed by the laws of thermodynamics. As Patricia Kitcher writes, "when we take a careful look" at the metapsychological principles employed by Freud, "they turn out to be eminently defensible and very like the canons guiding contemporary interdisciplinary research in cognitive science" (41). Indeed, as Clark Glymour—a philosopher who works in connectionist theories of cognition—writes approvingly, "In Freud's *Project*, the infant is described more or less as an android run by a connectionist computer. If the details are a little hazy, and perhaps if we press even incoherent, still I think there is little doubt that Freud's conception of psychology and of the functioning of the mind is much the same as that of our contemporaries" (65). When contemporary neurologists locate unconscious processes—repression, negation, affective transference—through MRI and PET scans, they are, in some sense, fulfilling the promise set out by Freud's *Project*. It is precisely this trajectory of Freud's thought that Lacan registers when he writes that

Freud hoped “that one day there would be a thermodynamic able to provide—within the future of science—the unconscious with its posthumous explanation” (*Television*, 39). While Freud understands the unconscious as a system of neural connections, Lacan works to rigorously separate the unconscious from the biology of the brain. Lacan’s critique of Freud’s thermodynamic thought, however, is complex, for at the same time that he insists the unconscious is not in the brain, he insists on the importance of Freud’s scientism for the development of psychoanalysis. Lacan argues that in order to follow the path laid out by Freud, the language of physiology and thermodynamics must be untangled from the unconscious. A central component of Lacan’s revision of Freud’s metapsychology thus involves a reckoning with the problem of energetics in Freud’s thought.

As Kitcher writes, “Freud’s intellectual heirs have continued the denial of biological foundations, now with two motivations. Besides the wish to enhance the creative genius of their hero, they are understandably reluctant to take seriously the idea that much of Freudian theory stands—or falls—with nineteenth-century biology” (43). It is in just these terms, however, that Lacan’s revision of Freud’s metapsychology is of special interest. Rather than deny Freud’s intellectual heritage, as a systematic application of nineteenth-century biology, Lacan insists precisely on the importance of Freud’s scientism.

I am saying, contrary to what has been trumped up about a supposed break on Freud’s part with the scientism of his time, that it was this very scientism—which one might designate by its allegiance to the ideals of Brücke, themselves passed down from Helmholtz and Du Bois-Reymond’s pact to reduce physiology, and the mental functions considered to be included therein, to the mathematically determined terms of thermodynamics (the latter having attained virtual completion during their lifetimes)—that led Freud, as his writings show, to pave the way that shall forever bear his name. (*Écrits*, 728)

And yet while Lacan insists on the importance of scientific thermodynamics for the genesis of

Freud's thought, his central revision of Freud involves a critique of Freud's energetics.

In *Television*, a series of interviews conducted by Jacques-Alain Miller and broadcast on French television, Miller asks, in light of Lacan's proposition that the unconscious is structured like a language, "what do you do with anything that doesn't get mixed up with words? What of psychic energy, of affect, or the drives?" (17). Miller begins by posing the question of "natural energy" (18). Lacan's perhaps predictable response is worth quoting at length.

Natural energy—that's another medicine ball used to prove that on that point as well one's got ideas. Energy—it's you who added the tag natural, because in what they say, it goes without saying that energy is natural: something to be expended, insofar as a dam can store it and make it useful. However, it's not because the dam looks picturesque in a landscape that energy is natural.

That a "life force" should constitute that expenditure is a crude metaphor. Because energy is not a substance, which, for example, improves or goes sour with age; it's a numerical constant that a physicist has to find in his calculations, so as to be able to work.

To work in accordance with what has been fostered, from Galileo to Newton, as a purely mechanical dynamics—with what forms the core of that which is called, more or less correctly, a physics—something strictly verifiable.

Without this constant, which is merely a combination of calculations [...] you have no more physics. It's generally thought that that's the physicists' business and that they adjust the equivalences between masses, fields, and impulses so that a number gets pulled out that complies with the principle of the conservation of energy. But still, such a principle has to be stated in order for a physics to meet the requirements of verifiability; it is, as Galileo put it, a fact experimentally produced by a theory. Or, to put it better: the condition that the system be mathematically closed prevails even over the assumption that it is physically isolated.

That's not just of my own devising. Each and every physicist knows clearly, that is to say, in a readily articulated manner, that energy is nothing than the numerical value of a constant. (18)

If energy assumes a system of signs governed by the "numerical value of a constant," then energy cannot be "natural," for it appears only within an articulated network of signifiers. Lacan argues, in other words, that an appeal to affect, to the drive, to psychic energy, does not get rid of the problem that everything is "mixed up with words," for, in that it is structure articulated in

signifiers, a theory of natural energy is itself a linguistic construction. Thus, as Lacan writes, nothing can be known “that doesn’t have the structure of language”(*Television*, 23). It is with respect to the question of affect that Lacan presents himself as a moralist. The only sin, for Lacan, is what Serge André calls “the ideology of ‘depression’” (263),¹⁷ where rather than function as a motivation to say something about the structure within which the human is caught up, “sadness”(*Television*, 22) is understood as the effect of a less than optimum “psychological tension”(*Television*, 22). As André continues, “this ideology is articulated around the fundamental notion of a capital of energy (whether it has to do with monetary energy, nervous energy, the energy of the humours, or the moral energy of the individual)” (263).¹⁸

Lacan’s insistence that there is no escape from language, that a theory of affect relies on an ideology of thermodynamics, has seemed, to some of Lacan's commentators, as a dogmatic imposition of theoretical orthodoxy. As Adrian Johnston writes, “not only is Lacan’s apparent allergy to the life sciences common knowledge—he is notorious, particularly among those of a “poststructuralist” bent, for allegedly ignoring affects altogether” (254).

A chorus composed of Lacanianism’s discontents tirelessly rehearses the charge that Lacan, going against what is said to be essential to the psychoanalytic endeavor both within and beyond the clinical setting, neglects everything that won’t be squeezed into the confines of the conceptual boxes constructed along the lines of classical structuralism. The tyranny of the signifier ostensibly imposed by Lacan is, from this perspective, to be countered through recovering and re-emphasizing Freud’s energetics, including his reflections on affective dynamics (but not through engaging in the least with what the sciences have to say regarding these matters). (254)

Relying on the work of the neurologist Antonio Damasio, as well as on Catherine Malabou's

¹⁷ « L'idéologie de la ‘dépression’ »

¹⁸ « Cette idéologie s’articule autour de la notion fondamentale d'un capital d'énergie (qu'il s'agisse de l'énergie monétaire, de l'énergie nerveuse, de l'énergie humorale ou de l'énergie morale de l'individu), dont la tendance doit être maintenue à la hausse pour conserver son pouvoir. »

work on the philosophical implications of the plasticity of the brain—in which structure is not given but emerges as an effect of neural connections—Johnston suggests the unconscious is not, as for Lacan, the experience of being caught up in the structure of language, but rather, that the unconscious is a structure, a system of relations between “unfelt feelings” and the feeling of these feelings.

That is to say, instead of being elementary givens qua irreducibly immediate experiences of phenomenal consciousness, the phenomena of affective life involves filterings, foldings, mediations, and redoublings that make these phenomena much more complex and much less self-evident than is usually suspected. One fashion of putting this loosely is that feelings are always the feelings of feelings. And unconscious forces and factors subsist and intervene in the gap between feelings and the feelings of feelings. (257-8)

Johnston argues that Lacan relies on an outdated notion of immutable structure, derived from Freud's energetics, and that a neurally embedded and scientifically defensible unconscious can in fact be located in the brain. While for Lacan the discourse of the unconscious registers the fact that “the body of the human being is itself affected by the structure, that is to say affected by the structure of language in which the human being lives and in which he takes possession of (and also disowns), his body” (André, 273),¹⁹ for Johnston the unconscious would seem to be a structure. Despite Johnston's conviction that that a neurologically informed line of Lacanian thought can be worked out, there is a real incompatibility between Johnston's unconscious and Lacan's unconscious. In arguing that the unconscious is structured like a language, and not like a brain, Lacan is not imposing a rigid structure—as opposed to the plasticity of the brain—on the unconscious, but, rather, insisting that the unconscious responds to a problem of structure. When

¹⁹

□ « le corps de l'être humain est lui-même affecté par la structure, c'est-à-dire affecté par la structure de langage dans laquelle il habite et dans laquelle il prend possession (et dépossesion) de son corps »

Lacan writes that the unconscious is structured like a language, it is important to clarify what kind of structure language has. Language, for Lacan, always fails, is never complete. This would not be true if there were such a thing as a metalanguage, but, as Lacan never tires of repeating, there is no such thing as a metalanguage. The structure of language is the structure of this failure. As Lacan writes, “if I have said that language is what the unconscious is structured like, that is because language, first of all, doesn’t exist”(Seminar XX, 138). The Lacanian unconscious is not the kind of thing that could inhere within the plastic structure of the brain, for the Lacanian unconscious is a linguistic construction that responds to a specific problem—to the fact that there is no Other, that there is no discourse that answers to the scene of human subjectivity. If the neural unconscious existed, in other words, there would be no need for the Lacanian unconscious. In his reading of Freud, Lacan will therefore insist that at the center of Freud’s thought, beyond the thermodynamic structure of the brain, there lies a problem of structure.

II. A Neurological Solution to an Empiricist’s Problem

Johnston's critique at once clarifies the stakes of Lacan's turn away from a neurological explanation of the unconscious, and foregrounds Lacan's debt, through Freud, to a central problem of empiricist thought—the question of how, beginning with the particularity of sensory experience, one can arrive at a theory of coherent and consistent bodies. While a thermodynamic theory offers an explanation to this problem, suggesting that there is no such thing as discrete experience—since the particularity of any fact occurs within the fluid transformations of the body which is the brain—Lacan will insist that the question of how

experience coheres remains the central problem for the human. While Mansel's appropriation of Kant, which in large part derives from William Hamilton and is taken up by Spenser, was decisive in late nineteenth-century English thought on energetics, at the turn of the century, as Jacques Le Rider writes, “a specifically ‘Austrian’ philosophy [was] closer to ‘English’ thinking than to anything post-Kantian” (12). In particular, “John Stuart Mill seemed to be exercising a greater influence on Viennese modernity than Kant” (12). Freud assisted in the German translation of Mill's collected works, and, “cited *A System of Logic*, and referred freely to [Mill's] principle of the complication of causes” (*Freud's Dream*, 13). Lacan's reading of Freud works to disentangle Freud from two distinct philosophical traditions, arguing that a problem of how experience is organized (a problem of empiricism) remains unsolved in Freud's thermodynamic explanation of the human (which is a Kantian solution, in that experience is organized by an *a priori* structure—the brain). An understanding of Freud's debt to Mill requires a brief tour of Mill's epistemology.

In *The Philosophy of Sir William Hamilton*, Mill articulates, through a close critique of Hamilton's philosophy of the conditioned (which is taken up by Mansel), a theory of knowledge and mind that does not require recourse to *a priori* laws of thought. The problem that Mill faces, in that he wants to construct an epistemology that does not require any *a priori* laws, is that of how the experiencing mind can be constructed out of discrete experiences, without appealing to a general, *a priori* law, previous to experience, that would govern the organization of these discrete experiences.

To this end, Mill's project will work to establish that thought can move from particular to particular, in order to generate general laws, without first appealing to an *a priori* law that governs the movement from particular to particular. The problem that Mill faces was first

articulated by Hume: in order to construct a theory of knowledge out of particular observations, it seems we must first import a general law about the uniformity of nature. It seems that a law governing associations, a general law about the uniformity of nature, must be assumed, as a deductive premise, in order that the work of building a world out of discrete observations about phenomena can begin.

We should never have thought of affirming that all phenomena take place according to general laws, if we had not first arrived, in the case of a great multitude of phenomena, at some knowledge of the laws themselves; which could be done no otherwise than by induction. In what sense, then, can a principle, which is so far from being our earliest induction, be regarded as our warrant for all the others? (*Logic*, 307)

Mill's solution to this problem is to reverse the priority of deductive and inductive logic, by offering a novel interpretation of the syllogism—the form of logical argument where a general statement is the premise for deductions. Mill's argument is that if we assume that general statements must provide the warrant for reasoning, then nothing can ever be known that was not already assumed by the premise. As Mill writes, “It is universally allowed that a syllogism is vicious if there be anything more in the conclusion than was assumed in the premises. But this is, in fact, to say, that nothing ever was, or can be, proved by syllogism, which was not known, or assumed to be known, before” (*Logic*, 183). If knowledge is to advance, then we must change our understanding of the major premise of the syllogism. Mill thus argues that the major premise of the syllogism “All men are mortal, The Duke of Wellington is a man, therefore The Duke of Wellington is mortal” (185), is the conclusion of the inductive process, rather than the deductive warrant for the syllogism.

When, therefore, we conclude from the death of John and Thomas, and every other person we ever heard of in whose case the experiment had been fairly tried, that the Duke of Wellington is mortal like the rest; we may, indeed, pass through the generalization, All men are mortal, as an intermediate stage; but it is not in the latter half of the process, the descent

of all men to the Duke of Wellington, that the inference resides. The inference is finished when we have asserted that all men are mortal. What remains to be performed afterwards is merely deciphering our own notes. (*Logic*, 187)

In other words, the gambit of reason comes when we move from the observation that, in all the cases before us, men are mortal, to the supposition that something is true for which we have no observational warrant, namely, that all men are mortal. The major premise is not the beginning of the reasoning process, but rather its conclusion, “an affirmation of the sufficiency of the evidence on which the conclusion rests” (204). As Richard Rorty writes, the argument that a study of particulars could lead to laws, did “for science what the utilitarians had done for morality—making it something you could use instead of something you could merely respect” (*Philosophy and the Mirror of Nature*, 308). For Mill, in other words, the cohesion of the world is not provided by an *a priori* structure; rather, the creativity of the human intellect consists of constructing a coherent world out of discrete phenomena.

The problem, however, Alan Ryan suggests, is that “Mill’s philosophy required an active mind which would construct an external world out of sensations, and order it according to rationally organized theories; and yet he had no way of accounting for the existence of such an active intelligence” (226). As Donald McClosky writes, Mill’s epistemology would seem require that one explains “mind entirely in terms of *its* actual and possible states. A full translation would require the reference to *its*, the *mind’s*, states to be written out of the translation” (158). The full translation of the major premise “All men are mortal” would require, as Mill writes, a full “deciphering of our notes,” (All men are mortal means “John is mortal, Thomas is mortal, the Duke of Wellington is mortal, and etc...”). Likewise, the mind would seem to exist only as a series of mental events. The problem is that in refusing the *a priori* structuration of the mind

Mill seems to open the mind to continual modification by the introduction of new feelings and experiences. If mind is nothing but a shorthand for a series of feelings, the full translation of which is an always increasing set of experiences, then mind would seem to lack the stability required in order to construct a world.

Mill's solution to this problem is to introduce "mind" as a paradoxical limit of experience.

If, therefore, we speak of the Mind as a series of feelings, we are obliged to complete the statement by calling it a series of feelings which is aware of itself as past and future: and we are reduced to the alternative of believing that the Mind, or Ego, is something different from any series of feelings, or possibilities of them, or of accepting the paradox, that something which is, *ex hypothesi*, but a series of feelings, can be aware of itself as a series.
(Hamilton, 242)

Mill's critics have been unforgiving of Mill's introduction of this paradoxical ground at the center of an empiricist epistemology. As Ryan writes, "the extent to which this admission was a disaster for his whole philosophical system was lost on Mill" (266). Mill's entire system—his defense of scientific reasoning, of inductive logic—seems to stand or fall depending on whether one accepts the mind as the paradoxical ground of experience, and his paradoxical solution seems at least as problematic as the problem it is supposed to solve.

It is in these terms that William James, in turning to neurology, presents a solution to the problem of mind in Mill's epistemology. Instead of beginning from discrete phenomena and working to construct "mind," James argues that we must begin with the body on which those forces act.

Ordinary empiricism [...] has always shown a tendency to do away with the connections of things, and to insist most on the disjunctions. Berkeley's nominalism, Hume's statement that whatever things we distinguish are as "loose and separate" as if they had 'no manner of connection,' James Mill's denial that similars have anything 'really' in common, the resolution of the causal tie into habitual sequence, John Mill's account of both physical things and selves as composed of discontinuous possibilities, and the general pulverization of all experience by association and the mind-dust

theory, are examples of what I mean. (*Essays in Radical Empiricism*, 43)

James proposes that his “radical empiricism” avoids this problem by conceiving of experience as embedded in habit. As James writes, “no possible number of entities (call them as you like, whether forces, material particles, or mental events) can sum *themselves* together” (*Principles*, 161). As James continues, “forces' themselves do not combine [...] a body is needed on which they may impinge, to exhibit their resultant effect” (*Principles*, 162). The fact of the material of the brain, where forces inscribe themselves, becomes the principle of coherence that is missing from ordinary empiricism. The brain, in other words, is the coherence that is lacking from “ordinary empiricism.”

It is perhaps counter-intuitive to read James's appeal to the brain as a Kantian solution to a problem of empirical thought. Yet Thomas Carlson argues that James's appeal to neural structure as something that organizes perceptual material should be read as a reconfiguration of Kant's *a priori* structures. Whereas for Kant, space and time are the *a priori* forms of the intuitions, Carlson argues that for James, it is neural structure that provides the *a priori* form of experience. In these terms, James gives a Darwinian explanation of the Kantian categories. It is worth noting that this Kantian reading of James finds its correlate in a Jamesian reading of Kant. In her *Kant's Transcendental Psychology*, Patricia Kitcher argues, against dominant trends in Kant scholarship, that Kant's categories are not prior to experience, but might be read, rather, as the immanent organization of experience within the apperceiving subject. For James, in other words, the brain both emerges as the effect of empirical causes, and provides the *a priori* structure of experience.

What Lacan suggests in his critique of energetics, is that empiricists—insofar as they consider the brain the material basis of Kantian intuitions—are guilty of naturalizing an *a priori*

structure. As Lacan writes, “The speaking being loves its body, because he believes he has one. In reality, he doesn't, but his body is his only consistency” (*Seminar XXIII*, 66). The body—even the special body that is the human brain—depends upon a theory of a priori structuration. The consistency of the human body, for Lacan, comes only through the appeal to a transcendental support, in the mirror stage. When Lacan notes that the image united in the mirror is the “symbol of something that should be found in the structure of the cortex, the foundation of a certain relation of the man to the image of his body” (140, *Seminar X*)²⁰—referring, presumably, to the fact the sensory and motor functions, in the brain, are organized as a map of the human body, such that the neurons that refer to the index finger, for example, are between the neurons that control the middle finger and thumb—he is not suggesting that the neural mapping of the body is the basis of the consistency of the body, but, rather, that the consistency of the body, even at the level of neural structures, is an effect of language. As Lacan writes, “there is no real space. It is a purely verbal construction, that we spell out in three dimensions, following what we call the laws of geometry” (*Seminar XXIII*, 86). While the activity of the brain is a solution to Mill's problem of how a world can be built out of experience, Lacan will insist, in his reading of Freud's *Project*, that the problem of how the world coheres must remain at the center of psychoanalytic thought. Lacan's critique of energetics amounts, in these terms, to the claim that neurology, in finding the unconscious as a neural structure, excludes a problem of structure. When the unconscious is taken as a series of relationships that, as Adrian Johnston writes, “subsist and intervene in the gap between feelings and the feelings of feelings”(257-8), the unconscious appears within the structure of the brain. For Lacan, the unconscious is a specific kind of linguistic construction that responds to the problem of empirical

²⁰ « symbole de quelque chose qui doit se retrouver dans la structure du cortex, fondement d'un certain rapport de l'homme à l'image de son corps »

thought, to the fact, for Lacan, that for the human there is no immanent ordering of experience.

II. The Problem of Structure in Freud's *Project for a Scientific Psychology*

Freud's topography, in the *Project*, consists of three neural systems, through which various quantities of energy flow. The essential difference between these systems is that the while the peripheral system can “receive external stimuli,” the internal systems are connected “only with the interior of the body” (365). The peripheral system (which Freud calls the Φ -system) cannot store energy. It receives energy from the external world which it either releases back into the external world, through a reflex action, or which it transfers into the first of Freud's two internal systems (which Freud calls the Ψ -system). The Ψ -system, which is itself composed of the primary and secondary functions (which Freud will later call the pleasure principle and the reality principle), is able to store energy. It is on the basis of this stored energy that the human can search out, or act on, objects that are not immediately present. The problem that quickly emerges is that, since in the action of the primary processes—those processes that search the desired object—energy moves from the internal Ψ -system to the peripheral nervous system, there must be a check on the primary processes, to ensure that the system acts only on actual, as opposed to imagined, objects. It is here that Freud's third system, the W -system, or consciousness system, comes into play, for consciousness is always, for Freud, in relation to real object that exist in the external world. As Freud writes, “consciousness gives us what we call ‘qualities’—sensations which show a great variety of ‘differences’ and whose differences depend on relations to the external world” (369).

Since Freud wants to give a quantitative explanation of the human, the question of

consciousness raises “the problem of quality” (369). Freud thus proposes that “the structure of the neuronic system consists in contrivances for changing external *quantity* into *quality*” (370). It is the consciousness system (or *W*-system) that is responsible for this transformation of quantity into quality.

I can see only one way of escape: to revise our basic hypothesis of the passage of quantity (*Q'n*). Hitherto I have regarded it only as a transference of quantity (*Q'n*) from one neuron to another. It must have another attribute, however, of a *temporal* character; for the mechanics of the physicists have assigned this temporal attribute even to the motions of masses in the external world. I shall describe this attribute briefly as “period.” Thus I shall assume that the resistance of the contact-barriers applies only to the transference of quantity (*Q*), but that the *period* of neuronic motion is transmitted without inhibition in every direction, as though it were a process of induction. (371)

Most of the energy that enters into the body is filtered out by the groups of cells—the “nerve ending apparatus”, whether muscles, skin, the eyes, all of which have a threshold— through which the peripheral nervous system makes contact with the external world. Some of the energy that passes through the “nerve ending apparatus” moves into the peripheral (Φ) system; the portion of energy that does not cause an automatic reaction passes into the internal (Ψ) nervous system. The energy that passes through these two systems has a period, but these two systems register the quantity of energy, not the period of the impulses. System *W*, in contrast, registers the period.

Perceptual neurons are incapable of receiving quantities (*Q'n*), but that they assimilate the *period* of an excitation and that this condition of theirs of being affected by a period, while being filled with only a minimum of quantity (*Q'n*), is the fundamental basis of consciousness. The Ψ -neurons, too, have of course their period, but this is devoid of quality, or, to put it more accurately, is monotonous. Deviations from this specific psychical period reach consciousness as qualities. (371-2)

Conscious experience, in other words, depends upon a certain harmonization between the peripheral and internal nervous system, for it is only when energy enters into the nervous system

from an external cause that the periods of excitation in the internal system deviate from their “monotonous” norm. It is this deviation in period that is registered as a quality by the consciousness system. As Freud writes, “it is these modifications which pass from Φ through Ψ to W , and there, where they are almost devoid of quantity, generate conscious sensations of qualities. This transmission of quality is not durable; “it leaves no traces behind it and cannot be reproduced” (372). In Freud’s topography, this W -system ultimately forms the seat of judgment. Because the affective—qualitative—response in the W -system is determined by a the subtle periods of energy that pass through the peripheral (Φ) system into the internal (Ψ) system before being registered as qualities by the perceptual system (W), the affects registered by the consciousness system functions as a guarantee that the discharges of the primary processes correspond to real objects. As Freud writes, “indications of quality are [...] primarily indications of *reality*, and are intended to serve the purpose of distinguishing the cathexes of real perceptions from the cathexes of wishes” (429).

When Freud articulates the desired object—the basis of the wish that originates in the primary processes of the internal (Ψ) system (which will become the pleasure principle), and which qualitative, conscious experience verifies is in some relationship to a real object of perception—he begins with an analysis of what happens when a perceiving subject encounters an object like himself, another human being.

Let us suppose that the object presented by the perception is similar to the [percipient] subject himself—that is to say, a fellow human-being [*nebenmensch*]. The theoretical interest taken in it is then further explained by the fact that an object of a *similar kind* was the subject’s first satisfying object (and also his first hostile object) as well as his sole assisting force. For this reason it is on his fellow-creatures that a human being first learns to cognize. The perceptual complexes arising from this fellow-creature will in part be new and non-comparable—for instance, its features (in the visual sphere); but other visual perceptions (for instance, the movements of its hands) will coincide in the subject with his own memory of quite similar

visual impressions of his own body—a memory with which will be associated memories of movements experienced by himself. The same will be the case with other perceptions of the object; thus, for instance, if the object screams, a memory of the subject's own screaming will be aroused and will consequently revive his own experiences of pain. Thus the complex of a fellow-creature falls into two portions. One of these gives the impression of being a constant structure and remains as a coherent “thing” [*Ding*]; while the other can be *understood* by the activity of memory—that is, it can be traced back to information about the subject's own body. (393-4)

For Freud the coherence of the other—the fact that the other is a “constant structure” rather than a loose and disorganized set of perceptions and associations, results from the memory trace of a first “satisfying object” and “sole assisting force” to the helpless infant. The associations forged on the basis of this first object not only remain at work in later familial relationships, but become the basis for the subject's engagement in the world. Each new encounter with a “fellow creature” thus falls into “two portions”: the sensory experience of the other, and the experience of the other as an object of desire. It is only because the other has this feature of “thingness”—that the other appears as a *Ding*—that the other appears as a meaningful object within the subject's perceptual world.

While Freud speculates that the “first satisfying object” was the mother's breast, he is equally clear that the object of desire is never given in experience. As Freud writes, all “perceptual complexes are divided into a constant, uncomprehended portion—the “thing” (*Ding*)—and a changing, comprehensible portion—the attributes or movements of the thing” (441). As Freud continues, “the ‘thing-complex’ keeps reappearing in connection with a variety of ‘attribute-complexes’” (441). Following Freud's description of the *Ding* as the principle of cohesion that is missing from perceptual experience, Lacan writes that “*Das Ding* is that which I will call the beyond-of-the-signified” (*Seminar VII*, 54). Whereas the “attribute-complexes” produce pleasure or pain, Lacan uses another word, *jouissance*, to name the specific experience

associated with proximity to the *Ding*. While Freud's neural topography functions to keep the subject in a relationship to the *Ding*, the *Ding*, as that which determines the subject's attention and provides stability and coherence to the world, is missing from experience. The problem of judgment, for Freud, consists of making sure that the *Ding* is only at work within certain "attribute complexes," that enjoyment comes in its socially sanctioned forms. In Lacan's reading, it is Oedipus, the incest prohibition, which establishes the mother as the prohibited object of desire and thus situates the *Ding* within a specific set of "attribute-complexes." It is only in symptoms, where an unremarkable set of "attribute-complexes" have a disproportionate effect, that the action of the *Ding* becomes palpable, for the *Ding* does not exist, but can only be deciphered through the inexplicable deviations that it introduces into life. Lacan writes of the *Project* that "what Freud articulates as primary process in the unconscious—and this is me speaking here, but you can look it up and you'd see—isn't something to be numerically expressed [*se chiffrer*], but to be deciphered [*se déchiffrer*]. I mean: *jouissance* itself. In which case it doesn't result in energy, and can't be registered as such" (*Television*, 19). The *Ding*, as the missing object sought after by the primary processes, gives coherence to the energies that search out satisfaction but does not, itself, appear as an object that introduces energy into the organism, or that the organism can act on.

Whereas the operation of the primary and secondary processes can be described through the language of energetics, as the flow of energy through neurons, the *Ding* does not, itself, appear as energy. It is thus through a consideration of the problem of "thingness" of phenomena that Lacan disentangles the unconscious from neural structure. The Lacanian unconscious is concerned with the problem of the *Ding*, rather than with the system of energies, conditioned by the *Ding*, at work within the brain.

III. “Fabricated Men”

In Freud's description, it is the *Ding* that produces the other as a true other, as something more than what is revealed through the perceptual experience of the other. In *The Philosophy of Sir William Hamilton*, Mill, having defined “mind” as the paradox of a self-conscious series of feelings, turns, like Freud, to the question of other human beings around him.

By what evidence do I know, or by what considerations am I led to believe, that there exist other sentient creatures; that the walking and speaking figures which I see and hear, have sensations and thoughts, or in other words possess Minds? [...] I conclude it from certain things, which my experience of my own states of feeling proves to me to be marks of it [...]. I conclude that other human beings have feelings like me, because, first, they have bodies like me, which I know, in my own case, to be the antecedent condition of feelings; and because, secondly, they exhibit the acts, and other outward signs, which in my own case I know by experience to be caused by feelings. I am conscious in myself of a series of facts connected by a uniform sequence, of which the beginning is modifications of my body, the middle is feeling, the end is outward demeanor. In the case of other human beings I have the evidence of my senses for the first and last links in the series, but not for the intermediate link. I find, however, that the sequence between the first and last links is regular and constant in those other cases as it is in mine. In my own case I know that the first link produces the last through the intermediate link, and could not produce it without. Experience, therefore, obliges me to conclude that there must be an intermediate link; which must either be the same in others as in myself, or a different one: I must either believe them to be alive, or to be automaton: and by believing them to be alive, [...] I bring other human beings, as phenomena, under the same generalizations which I know by experience to be the true theory of my own existence. [...] We know the existence of other beings by generalization from the knowledge of our own: the generalization merely postulates that which experience shows to be a mark of the existence of something within the sphere of our consciousness, may be concluded to be a mark of the same thing beyond that sphere. (243-4)

For Mill, as for Freud, the perception of another human being falls into two components. On the one hand, there are the “outward signs” through which one experiences the other in the

perceptual field. For Mill, as for Freud, the perceiving subject notes that the other has a body like his own—as Freud writes, “visual perceptions (for instance, the movements of its hands) will coincide in the subject with his own memory of quite similar visual impressions of his own body—a memory with which will be associated memories of movements experienced by himself” (393). Yet there is nothing the field of visual perception that would suggest that the other is more than a series of automatic responses. For both Mill and Freud, the other comes into existence only through a second associational leap, which grants the other the status of being a *Ding*—a coherent other. But while for Freud the question is the relationship between the *Ding* and the attributes that it organizes, Mill, in his nightmarish vision of a world filled with automatons, gestures towards a world in which the principle of “Thingness” has vanished, towards a world in which there is no beyond-of-the-signifier.

For both Freud and Lacan, the world of experience is humanized only through the addition of an *a priori* principle that provides coherence to experience. The mother is the first “Thing.” Yet whereas for Freud the human's earliest experience is the experience of the mother as a “Thing,” for Lacan the experience of the mother as “Thing” comes only through the stage of development that he calls the mirror stage. Before the mirror stage, in Lacan's description, the child is exposed to the world of experience, and does not yet have the support of a transcendental principle through which experience can be organized. In the mirror stage, the child, looking at the image of him or her self in the mirror, sees only disjointed and disorganized limbs. Whereas Lawrence, as I have argued, suggests the world of experience possess an immanent principle of organization, Lacan insists that there is only a chaos of phenomena. It is only when the child identifies with the body that he sees his mother smiling at in the mirror, that the body appears as a coherent “Thing” that he possesses. In Lacan's developmental narrative, from the time that the

child identifies with the body that he sees his mother admiring in the mirror—what Lacan calls the ideal ego, or *i(a)*—rather than with his experience of his disorganized and uncontrolled body—which Lacan describes as “the disorder of little “*a*”s—, he is caught up in the various dramas of seduction that will structure his or her relationships with others.

Before the mirror stage, that which will be *i(a)* [the ideal ego] is in the disorder of little “*a*”s, where it is not a question of whether one has them or not. It is not the exterior world that one is lacks, as one improperly expresses it, but rather oneself that is lacking. (*Seminar X*, 140)²¹

For Lacan, the psychotic subject is he or she who has not passed through the mirror stage. As Lacan notes, “the disorder of little “*a*”s” that exists before the mirror stage, returns in “the fantasy of the fragmented body that certain of you have encountered in schizophrenics” (*Seminar X*, 140). As, for Mill, the world, without the addition of “mind,” is populated with automatons, for the psychotic the world is filled with what Lacan calls, after Schreber, “fabricated men.”

It is the Other, as that which provides coherence to the disorder of visual phenomena, that is missing for the psychotic. In other words, it is the psychotic who refuses the Other as a transcendental support that will provide cohesion to the phenomenal world. To understand psychosis, Lacan writes, one must return to the mirror stage.

It suffices to refer to the moment I have marked as characteristic of the experience of the mirror and paradigmatic of the construction of the ideal ego in the space of the Other—the moment where the infant turns his head, tracing the familiar movement that I have described to you, towards this Other, this witness, this adult who is there behind him, to communicate to her, by his smile, the manifestations of his jubilation about something, let us say, that makes him communicate with this specular image. If the relation that is established with the specular image is such that the subject is so captivated by the image that this movement is not possible, then the pure

²¹ « Avant le stade du miroir, ce que sera *i(a)* est dans le désordre des petits *a* dont il n'est pas encore question de les avoir ou pas. [...] Ce n'est pas du monde extérieur qu'on manque, comme on l'exprime improprement, c'est de soi-même. Ici s'inscrit la possibilité de ce fantasme du corps morcelé que certains d'entre vous ont rencontré chez les schizophrènes. »

dual relation will dispossess him of his relation to the big Other. (*Seminar X*, 142)²²

The psychotic, for Lacan, is precisely he or she who does not turn away from the particularity of visual experience. The problem of how things hang together, the seeming impossibility within an empiricist epistemology of how a world could be constructed out of the particularity phenomena, becomes a fact of the psychotic's lived experience.

Whereas for the neurotic subject the adult, smiling at the child's image, establishes the locus of the Other, and thus establishes the *Ding* as the beyond of the specular image, for the psychotic the *Ding* does not come to inhabit the image. As Lacan writes, "in delusional speech the Other is truly excluded, there is no truth behind, there is so little truth that the subject places none there himself, and in the face of this phenomenon, his attitude is one of perplexity" (*Seminar III*, 53). Whereas Mill makes a rhetorical gambit in writing, of his experience of fellow human beings, "I must either believe them to be alive, or to be automatons" (*Hamilton*, 243), it is the psychotic, according to Lacan, who is truly caught in this problem. When a non-psychotic subject address an other, the other is "humanized," as it were, by the effect of an oedipal prohibition that makes the other appear as an object of desire. In the psychotic, the principle of "Thingness" disappears.

The Other being truly excluded, what concerns the subject is actually said by the little other, by the shadow of others, or, as Schreber will express himself to designate all human beings he encounters, by fabricated, or *improvised* men. The small other effectively presents an unreal character, tending towards the unreal. (*Seminar III*, 53)

²² « Il suffit de se référer à ce moment que j'ai marqué comme caractéristique de l'expérience du miroir et paradigmatique de la constitution du moi idéal dans l'espace de l'Autre—ce moment où l'enfant retourne la tête, selon ce mouvement familier que je vous ai décrit, vers cet Autre, ce témoin, cette adulte qui est là derrière lui, pour lui communiquer par son sourire, les manifestations de sa jubilation, disons de quelque chose qui le fait communiquer avec l'image spéculaire. Si la relation qui s'établit à l'image spéculaire est telle que le sujet est trop captif de l'image pour que ce mouvement soit possible, c'est que la relation duelle pure le dépossède de sa relation au grand Autre. »

As Lacan writes, it will be a long time before the psychotic “attempts to restore an order, which we shall call a delusional order” (*Seminar III*, 53). In this period, when the Other is excluded, the subject is captivated by reality. For Lacan's psychotic the phenomenal world does not cohere. “Dispossessed of his relation to the big Other,” the subject is “captive to the image” (*Seminar X*, 142).²³ Whereas the subject who passes through the mirror stage finds a transcendental support for the coherence of the physical world, and thus encounters various objects as “*Ding*,” the psychotic is troubled by the *Ding*. Whereas for Hume or Mill, this skeptical threat can be explained away by referring to some other principle (custom, or the “mind”), the psychotic is left alone to bring coherence to the world, by producing a delusional meaning that explains the variety of perceptual experience.

In the delusion, as Lacan writes, the *Ding*—the principle of coherence—does not appear as a specular image. In the case of Schreber, it is not the case, as Freud had argued, that Schreber is in “a mirror relation” with “that being who is the other for him, namely God himself,” a relation modeled on “man's relation to woman” (*Seminar III*, 87). Rather, the relation, for Lacan, is between “God, with all that he implies, the universe, the celestial sphere” (*Seminar III*, 87) on the one hand, and on the other, “Schreber himself, literally decomposed into a multitude of imaginary beings with their toing-and-froing and their various transfixions” (*Seminar III*, 87). In the delusion, the psychotic is subject to “the emergence in reality of an enormous meaning that has the appearance of being nothing at all—in so far as it cannot be tied to anything, since it has never entered into the system of symbolization—but under certain conditions it can threaten the entire edifice” (*Seminar III*, 85). In other words, the psychotic solves the problem of how the world coheres in a distinct fashion. The world is not organized around a desired object, but by

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□ « Dépossédé de sa relation au grand Autre » and « captif de l'image »

an “enormous meaning” that brings order to phenomena within appearing itself—that is, within the world of phenomena. The Ding does not inhabit certain object, but rather appears in reality, as a single meaning that brings coherence to all phenomena. As Lacan notes, there is nothing inherently pathological about this psychic organization. A particularly well-organized delusion might prove sufficient to bring order to the world. It is only in “certain conditions” (*Seminar III*, 85) that the delusion fails, that the subject is exposed to the problem of the incoherence of the world that the delusion is constructed to solve.

In other words, the two moments that Lacan identifies in psychotic phenomena correspond to two distinct philosophical moments: in the moment of the crisis, the problem is an overexposure to the particularity of experience, while in the delusion, the particularity of experience is brought under the sign of an a priori principle. Psychotic phenomena express both the lack of meaning in the world—the “beyond-of-the-signifier,” that which is missing from reality—and the transcendental support for the disjointed phenomena of sensory experience. The problem of the *Ding*, in other words, might be thought the shared problem of empiricist and a priori philosophies. Kant famously declared that he was woken from his “dogmatic slumber” by Hume's skepticism; for Lacan, the delusional certainty of an a priori structuration of experience is a response to the problem of the *Ding*. In other words, empiricist and idealist thought are, for Lacan, two ways of dealing with the problem of the *Ding*, with the fact that that which troubles thought is missing from reality. If empiricist thought frames the problem of how a world is constructed out of experience, idealist thought solves this problem through the imposition of an a priori structure that organizes experience.

III. The Thermodynamic *Ding*, or, Wittgenstein's Psychosis

In *Seminar XVII: The Other Side of Psychoanalysis*, Lacan offers a brief reading of Wittgenstein's *Tractatus Logico-Philosophicus*, as exemplary of a delusional solution to the problem of the *Ding*. For Lacan, the *Tractatus*, in which Wittgenstein proposes that language signifies because language and world share the same transcendental structure, is possessed by a “psychotic ferocity” (62), through which a structure is elaborated that allows Wittgenstein to “not [...] know anything about the place where truth is in question” (63). Yet in this refusal to know anything about the place where truth is in question, Lacan writes, the *Tractatus* is a “prodigiously rich piece of stupidity, for it gives rise to a leverage point [...] namely that there is no metalanguage” (*Seminar XVII*, 61). Whereas in the *Tractatus* Wittgenstein argues that a logical metalanguage functions as the beyond-of-the-signified, from the late 1920's on, and stemming from his discovery that logic does not have a universal and unified form, Wittgenstein offers a thorough critique of the logicism of the *Tractatus*. In his late work, that is, he is motivated by the same “leverage point” as Lacan—by the conviction that “there is no metalanguage.” A reading of Lacan with Wittgenstein both frames the problem of the *Ding*—the place where truth is in question—and exposes the extent to which the philosophical heritage of thermodynamic thought is active within Lacan's thought.

Lacan describes scientific discourse in terms that are nearly identical to his description of Wittgenstein's *Tractatus*. As he writes, “our science's prodigious fecundity must be examined in relation to the fact, sustaining science, that science does-not-want-to-know-anything about the truth as cause” (*Écrits*, 742). In foreclosing the problem of truth, science seems like “a successful paranoia” (*Écrits*, 742). Russell Nieli notes, in a similar vein, that “the idea of world-

encompassing, monastic science, such as that presented in the *Tractatus*, certainly did not originate with Wittgenstein. It was, if fact, a common idea in certain intellectual circles in the latter half of the 19th century, being associated with such names as Helmholtz, Haeckel, and Mach” (158). Indeed, it is often suggested that the relationship of language to world that Wittgenstein outlines in the *Tractatus* takes its inspiration from Heinrich Hertz's 1893 *The Principles of Mechanics*, which attempts to explain how the mathematical language of thermodynamics—the same language that Freud appeals to as the basis of a scientific psychology—relates to physical reality. Like Lacan, who works in his reading of Freud's Project to show that the problem of the *Ding* is beyond of the field of energetics, and the basis of an experience—*jouissance*—that “doesn’t result in energy, and can’t be registered as such” (*Television*, 19), Wittgenstein, in the *Tractatus*, works to conceive of both language and world as governed by logic, and thereby offers a precise description of the *Ding* as the beyond-of-the-signified.

Hertz’s *The Principles of Mechanics* consists of two books. The first book contains assertions that, Hertz writes, are “*a priori* judgments in Kant’s sense” that have to do with the “internal intuition of, and upon the logical forms followed by, the person who makes the assertions” (45). In this first book, Hertz articulates the mechanics of an *a priori* geometrical space. The second book moves from a study of *a priori* geometrical space, to a mathematics that understands “times, spaces, and masses to be symbols for objects of external experience” (139). The claims in the second book are consistent with the purely formal claims of the first book, but conform “not only the demands of thought” (45) but also to “experience.” Hertz proposes that if we are to assume that mathematics is in accord with “external experience,” then we must be prepared to accept “a single general statement” about the internal logic of the physical world.

This “sole fundamental law of mechanics” is the proposition “that every system of natural bodies moves just as if it were assigned the problem of attaining given positions in given times, and in such a manner that the kinetic and potential energy shall be as small as possible”(16).

The consequence of this “fundamental law” is a theory of mathematical language in which the terms of mathematical relation signify because these same terms of relation are immanent to the physical world. Mechanics is meaningful because of a meta-mechanical fundamental law. While Hertz’s “fundamental law” proposes a logical structure that inheres within the world, it falls to Wittgenstein to universalize the relationship that Hertz articulates between mathematics and the world, taking into account the relation between language and the world.

Hertz is one of the few people cited by name in the *Tractatus Logico-Philosophicus*, where Wittgenstein writes that “in a proposition there must be exactly as many distinguishable parts as in the situation that it represents. The two must possess the same logical (mathematical) multiplicity. (Compare Hertz’s *Mechanics* on dynamical models.)”(4.04) James Griffin, mapping the similarities between the *Tractatus* and Hertz’s mechanics, writes that

Wittgenstein says that there must be something common between picture or fact; or, as Hertz puts it, ‘there must be a certain conformity between nature and our thought’. There must be conformity because, according to Wittgenstein, our names must behave as regards combining as the objects in nature behave, or, according to Hertz, because ‘the form which we give pictures is such that the necessity consequents of the pictures in thought are always the pictures of the necessary consequents in nature of the thing pictured’. (100)

The mathematical language of thermodynamic thought, as it is defended by Hertz, and taken up by Wittgenstein, solves the problem of the *Ding* by introducing the principle that “there must be a certain conformity between nature and our thought.” The place where, as Lacan puts it, “truth is in question,” is covered over by meta-theoretical statement. In appropriating the notion of a

logical metalanguage that determines relationships in both language and world from the fundamental law that Hertz articulates as the field of energetics, Wittgenstein at once pathologizes the mapping of language to world that is implicit in Helmholtz's mechanics—and thus implicit in the claim that the mathematical language of physics, of thermodynamic theory, has an internal relationship to reality—and pushes to its limit the claim that language signifies by virtue of a hidden logical structure that inheres in both the signifying units of language, and between objects in the natural world.

For the Wittgenstein of the *Tractatus*, language refers to the world because the relationship of signifiers in a proposition—which can be revealed by symbolic logic—is the same as the relationship between objects in the world. In the *Tractatus*, propositions of logic are true by virtue of their a priori form, rather than because of any content. As Wittgenstein writes, “[t]he propositions of logic are tautologies” (6.1) precisely because of “the *impossibility* of illogical thought” (5.4731). Wittgenstein argues that, since logic is the transcendental form both of language and of the facts that compose the world, language can only signify when it shows, by its form, a picture of how facts, in the world, are related. The only propositions that are meaningful are propositions that, by, virtue of the logical form embedded within them, show a picture of how things are related in the world. This means that any illogical use of language is meaningless, nonsensical, and without possible referent. Yet since logic is the transcendental form of the world, “logic” is not, itself, an object in the world. Therefore any proposition that tries to describe logical form—The *Tractatus*, for example—is, strictly speaking, nonsense. Wittgenstein thus concludes the *Tractatus* with a mystical appeal that his reader transcend the propositions he has just read: “Anyone who understands me eventually recognizes them as nonsensical, when he has used them—as steps—to climb up beyond them”(6.54). As in Lacan's

description of the “enormous meaning” that, in psychosis, the appearance of being nothing at all—in so far as it cannot be tied to anything, since it has never entered into the system of symbolization” (85), logical form is “nothing at all,” and is precisely that which is excluded from “the system of symbolization.” The linguistic articulation of logical form must, therefore, be replaced by a mystical relationship to the world as a limited totality. As Wittgenstein writes, “Feeling the world as a limited whole—it is this that is mystical” (6.45). Through this mystical feeling, “[t]he solution of the problem of life is seen in the vanishing of the problem” (6.521).

Rudolph Carnap, who failed to notice the mystical conclusion to the *Tractatus*, found inspiration in the logical rigor of the *Tractatus*. Carnap writes that his own “more radical outlook”—that metaphysical statements are not only excluded from science, but, strictly speaking, nonsense—“was influenced by Wittgenstein's view that metaphysical statements, while in principle unverifiable, are therefore senseless” (quoted in Nieli, 63). Because language can be meaningful only if it refers, through its structure, to objects in the world, Carnap suggests that he owed to Wittgenstein the “insight that many philosophical sentences, especially in traditional metaphysics, are pseudo-sentences, devoid of cognitive content” (*Intellectual Autobiography*, 25). Carnap was thus surprised, upon meeting Wittgenstein in 1927, that Wittgenstein seemed a mystic troubled by metaphysics. As Carnap writes, Wittgenstein seemed to view mathematics and science “with an attitude of indifference and sometimes with contempt” (*Intellectual Autobiography*, 28), and he “sometimes had the impression that the deliberately rational and unemotional attitude of the scientist and likewise any idea which had the flavor of 'enlightenment' were repugnant to Wittgenstein” (*Intellectual Autobiography*, 26).

For Carnap, the *Tractatus*, read as a technical procedure to expose the fraud of metaphysical statements, helped ground a logical positivist critique of Heidegger's philosophy as meaningless

and metaphysical. Heidegger's own response to Carnap, in *An Introduction to Metaphysics*, clarifies the terms of Carnap's misunderstanding of Wittgenstein. For Heidegger the “fundamental question of metaphysics” is “Why are there essents²⁴ rather than nothing.”

Perhaps the whole body of logic as it is known to us, perhaps all the logic that we treat as a gift from heaven, is grounded in a very definite answer to the question about the essent; perhaps, in consequence, all thinking which solely follows the laws of thought prescribed by traditional logic is incapable from the very start of even understanding the question about the essent by its own resources, let alone actually unfolding the question and guiding it to a strict answer. Actually it is only an appearance of a strict, scientific method when we invoke the principle of contradiction and logic in general, in order to prove that all thinking and speaking about nothing are contradictory and therefore meaningless. In such a contention “logic” is regarded as a court of justice, established for all eternity, whose rights as first and last authority no rational man will impugn. Anyone who speaks against logic is therefore tacitly or explicitly accused of irresponsibility. And the mere accusation is taken as a proof and an argument relieving one of the need for any further genuine reflection. (*An Introduction to Metaphysics*, 25)

In these terms, Carnap's mistake is to see the *Tractatus* as proving that metaphysics is meaningless, when in fact, the *Tractatus* attempts to solve, precisely, the problem of why there is something rather than nothing. For Wittgenstein, it is not a question of doing away with the problem of metaphysics, but rather a question of solving the problem of metaphysics. The Wittgenstein of the *Tractatus* does not consider metaphysics nonsense, as Carnap suggests. It is rather the case for Wittgenstein that, as Heidegger writes, “the whole body of logic [...] is grounded in a very definite answer to the question about the essent.” If the *Tractatus*, as Lacan suggests, is a “refusal of the place where truth is in question,” it is a definite refusal.

The problem of the “Nothing” does not just appear as a term of external critique, as an interpretation of the *Tractatus*. Besides *The Principles of Mechanics*, a second important source text for the argument of the *Tractatus* is Otto Weininger's *Sex and Character*. As Desmond Lee,

²⁴ “Essent” is the translator's coinage. As he writes, “essents” are “existents,” or “things that are” (*An Introduction to Metaphysics*, ix).

who was one of Wittgenstein's students after Wittgenstein's return to Cambridge in the late 1920's, writes, Wittgenstein "had a great admiration for Weininger's *Sex and Character* and for the introduction to Hertz's *Mechanics*. Both of these he made me read" (*Portraits of Wittgenstein*, 195-6). It would be hard to choose two books more opposed in spirit than *The Principles of Mechanics* and *Sex and Character*. While Wittgenstein appeals to *The Principles of Mechanics* as a model for his notion of the relationship between language and world, I want to suggest that the problem that the *Tractatus* solves—the problem of why there is something rather than nothing, which is equally the problem of Lacanian "Thing"—comes from *Sex and Character*, a book which is devoted to resolving the problem of a "nothingness" that threatens all being.

Sex and Character articulates a fundamental bisexuality in which there is the "existence of original sexual characteristics"—the two possibilities of Man and Woman—in every cell" (22). This fundamental bisexuality does not, as for Lawrence, reveal the logic of a natural rhythm or flow. Rather, it becomes a metaphysical battle ground between "*Unadulterated Man*" who "*is the image of God, of the absolute **something**,*" and "*Woman, including Woman in Man,*" who "*is the symbol of **nothingness**.*"²⁵ While sexual relationships are complementary—and Weininger offers a law through which the percentage of "Man" and "Woman" in the two partners each add up to "one"—this complementary does not solve anything, for each subject must overcome the Woman within. The "Woman Question" is not to be solved at the level of the social link—by making a space for Woman in society—but, rather, through the articulation of a metaphysical position, through which the human overcomes the principle of "Woman," and becomes "Man."

²⁵ All emphasis, whether through italics or bolding, is Weininger's.

For Weininger, the problem of humanity is the struggle to overcome this “nothingness.” Whereas animal life struggles against its environment, the human struggles against nothingness. “In *humans* it is not a *limited* being that struggle against a *limited non-being* (as in the animal kingdom): *the opponents here are limitless being and limitless non-being*” (268).

The *purpose* of Woman, then, is to be *non-purpose*. She represents *nothingness*, the opposite pole to the divinity, the *other possibility* in humankind. That is why, quite rightly, nothing is regarded as more contemptible than a man who has become a woman, and why such a man is respected even less than the most dimwitted and coarsest criminal. And this also accounts for the deepest *fear* in Man: *the fear of Woman*, that is, the fear of meaninglessness, the fear of *the tempting abyss of nothingness*. (268)

Woman, as the “abyss of nothingness” is opposed to the principle of meaning, which Weininger finds in the logical proposition “ $A=A$,” a proposition that is not in itself meaningful, but which is the basis of all meaning.

$A=A$, the *principle of all* truth, cannot itself be a *specific* truth. Whoever finds the principle of identity, or the principle of contradiction, devoid of meaning has himself to blame. HE expected to find specific ideas in them, and he hoped to add to his fund of positive knowledge. But those principles in themselves are no insights, no specific acts of thought, but *the standard applied to all acts of thought*. *This cannot itself be an act of thought which could be compared in any way to the others*. *The norm of thought cannot be situated in thought itself*. The principle of identity adds nothing to our knowledge. Rather than increasing a fortune, it profices the complete foundation for that fortune in the first place. *The principle of identity is either nothing, or it is everything*. (135)

The principle of logical identity is not in thought, but is rather the standard applied to thought, and if thought is not based in the principle of identity, thought itself ceases to exist. “Woman” is “*amoral*” and “*alogical*.” She “has no relationship with the idea” and, “mathematically speaking [...] has *no algebraic sign*” (258). Weininger proceeds to identify this lack of morals and logic with an excess of sexuality and drive at work in Woman. In his reading of hysteria Weininger writes that the “foreign body” in the hysteric

is *sexuality*, which she does not *acknowledge* and which she does not accept as belonging to her, but which she can no longer *banish*, as she was able to do when her drives silently and as if forever retreated before the invasion of morality. Even now the sexual ideas that she has repressed through a supreme effort may “*convert*” into all possible kinds of conditions and produce that protean illness, those leaps from one part of the body to another, that propensity to imitate anything, and that lack of any constancy, which have always made it so difficult to define hysteria by its symptoms. But now no “conversion” completely absorbs the *drive*, which longs to express itself and which is not *exhausted* by any transformation. (242)

While “Man” is the principle of logic that affirms the existence of the world, “Woman,” who is “amoral” and “alogical,” given over to sexuality and the drive, is the negation of being, logic, and morality.

For Weininger, the nothingness of the drive can be overcome only if Man assumes a position of “genius.” The genius is the fully conscious subject who is the “microcosm” of the world. Weininger writes that the human being is “the only entity in nature [...] which has a relationship with all the things in it” (151). Weininger describes this relationship, felt by men of Genius, with the world as a whole as “a certain *boundary feeling* of the supreme reality” (147). Weininger borrows a Kantian vocabulary, but in a distinctly uncritical manner.

Nothing is totally alien to [the Genius] and he is linked to all things in the world by a bond of sympathy [...]. The moral law comes from the human soul, which holds all totality, *and which can contemplate everything because it is everything*: the starry heavens and the moral law, they two are basically one and the same thing. The universalism of the categorical imperative is the universalism of the universe. (150)

The man of genius, “the actual microcosm” (151) lives in this “state of universal consciousness” (151). Woman, the drive, is the other possibility in humankind—unconsciousness, amorality, separation—while Man, realized in the genius, is the universal that overcomes this separation.

In the mysticism of the *Tractatus*, it is, likewise, a certain relationship to the propositions of logic—as the norm of all thought—that overcomes the problem of the “nothing.”

Wittgenstein's subject comes to occupy the same position as Weininger's genius. As Wittgenstein writes "I am my world. (The microcosm)". Since "logic pervades the world [...]" the limits of the world are also its limits" (5.61). Wittgenstein continues that "The subject does not belong to the world: rather, it is a limit of the world" (5.632). The subject and the world share the same limit—the transcendental structure of logic. The subject, coordinated with the world, exists without excess, free from the drive. Yet whereas for Weininger the "nothing" that is "Woman" is the other potential of humanity, Wittgenstein gives this "nothing" a precise logical form, for this "nothing" is nothing other than the excess that is logical form itself. Wittgenstein thus, against his will—and this is part of his "prodigious stupidity" for Lacan—articulates the signifier as it produces the hole in being that Lacan names *das Ding*. Wittgenstein must jettison this figure of excess—logical form itself—in order to save language from its excess. The "nothing," in other words, is the *Ding*, for it is precisely logical form, that which has no place within the world, that provides coherence to Wittgenstein's world. The *Tractatus*, as Heidegger might be read to suggest, offers a definite answer to the question of why there are things rather than nothing.

VI. Wittgenstein's self-critique: Language troubled by the *Ding*

In the late 1920's, Wittgenstein's work on the logic of color perception brought him to the realization that there is no such thing as unified logical structure.²⁶ If there is no such thing as

²⁶ Wittgenstein's argument that language and world share the same logical form depends upon the assumption of the necessity of logical form, which is distinguished from the accident of what is actually the case. Nothing that happens in the world—accidents of what is the case—can contradict logical form, because logic is the form of all that happens in the world. This means that no two elementary

unified logical structure, it cannot be the case that that logic is the transcendental structure of the world. In 1931, not long after he had made this discovery, Wittgenstein recommended *Sex and Character* to G.E. Moore, who did not find the book to his liking. In a response to Moore's distaste for Weininger, Wittgenstein writes that

I can quite imagine that you don't admire Weininger very much with that beastly translation and the fact that W. must feel very foreign to you. It is true that he is fantastic but is great and fantastic. It isn't necessary or rather not possible to agree with him but the greatness lies in that with which we disagree. It is his enormous mistake which is great. I.e. roughly speaking if you just add a “~” to the whole book it says an important truth.
(*Cambridge Letters*, 250)

While Wittgenstein's *Tractatus* articulates something like Weininger's position of genius, from the 1930's on, Wittgenstein takes this position of genius as an object of critique. Rather than

propositions can contradict each other. If two elementary propositions were in contradiction, then the distinction between necessity and accident, between transcendental logic and the accident of what is actually the case, would erode. Therefore, in the *Tractatus*, the proposition “this point in the visual field is red” has the logical form: “this point in the visual field is red, and nothing else.” The logical structure of color rules out the possibility that two colors would be at the same point in the visual field not because of a contradiction between two elementary propositions, but because a supplementary statement—'and nothing else'—rules out that another color could be present.

In “Some Remarks on Logical Form,” Wittgenstein revisits this problem. He begins by calling into question whether, indeed, a statement about color can be analyzed into two statements, suggesting that instead each degree of color must be described by a separate elementary proposition.

Wittgenstein notes that the possible logical products of two statements, 'P' and 'Q,' should correspond to the following truth table:

P	Q
T	T
T	F
F	T
F	F

Yet if “P”= “this is red” and “Q”=“this is blue,” then the actual possibilities are:

P	Q
T	F
F	T
F	F

A point in the visual field can be red, blue, neither, but not both. The contradiction would be written as the top line of the truth table (T,T). Yet the contradiction “gives the proposition a greater logical multiplicity than that of the actual possibilities” (“Remarks,” 35). Color has a distinct logical structure. Language and world are thus no longer underwritten by a single truth table, which defines the space of all logical possibility.

solve the problem of “nothingness” by occupying a position of genius, Wittgenstein takes the side of the “nothing” against genius. In a series of notebook entries from 1931 Wittgenstein remarks on both Weininger’s influence on him, and asks what it means to be a Jewish thinker. In *Sex and Character*, “Woman” and “the Jew” occupy an identical position. As the undifferentiated human can choose to be Man or Woman, he has the choice to be Christian or Jewish. In the same way that Woman is the allure of nothingness, Weininger writes that “nothing is easier than being a Jew, nothing harder than becoming a Christian. *Judaism is the abyss over which Christianity is erected, and that is why the Jew is the strongest fear and the deepest aversion of the Aryan*” (298). Judaism is not a “race or a nation” but a “cast of mind, a psychic constitution” (274). Weininger writes that “Judaism [...] seems to be steeped in femininity” (276), and that the Jew, like Woman, lacks an “intelligible self”(278). The Jew, Weininger continues, “believes in neither mystery nor the transcendent”(284), and “can never be a genius”(285). Wittgenstein’s commentators tend to be relieved that these seemingly anti-Semitic comments don’t reach a more feverish pitch. However, while in the *Tractatus* Wittgenstein identifies with Weininger’s genius, with overcoming the “nothing” that is both “Woman” and “Jew,” in his late thought, Wittgenstein embraces precisely the quality of “Jewish thought” that Weininger wants to overcome.

In the notebook entry where Wittgenstein asks what it means to be Jewish, he writes, in a Weiningerian vein, that, “Even the greatest of Jewish thinkers is no more than talented [...] I think there is some truth in my idea that I really only think reproductively”(CV, 19). Wittgenstein continues that “the Jewish mind does not have the power to produce,” but, rather, must engage in “the work of clarification” (CV, 19). It is just this work of clarification that Wittgenstein turns to in the *Investigations*, where, in working to discover the origins of a fantasy of a metalanguage,

he writes that “our investigation seems only to destroy everything interesting” (119). If the *Tractatus* aspires to genius, to man as microcosm, the *Investigations* identifies the fantasy of man as microcosm as precisely that which must to be reduced to rubble through a process of clarification. Wittgenstein’s new reading of Weininger, in which he identifies with the Jew, rather than with the Christian man of genius, is part of a shift in Wittgenstein’s understanding of the relationship between language and drive. No longer is Wittgenstein’s a position, of genius, that will empty language of its excess. Rather, he identifies the idea of genius, as a relationship articulated through logic to the world as a “limited whole,” as a fantasy that moves through language, and from which he wants to free himself. Wittgenstein’s late thought shares, with Lacan’s thought, an understanding of the *Ding* as logical structure.

If in the *Tractatus* Wittgenstein solves the problem of the *Ding*, the void at the center of being, through an appeal to logic, in the *Investigations* this solution is his object of critique.

What we call ‘sentence’ and ‘language’ have not the formal unity that I imagined, but are families of structures more or less related to each other. —But what becomes of logic now? Its rigor seems to be giving way here. —But in that case doesn’t logic altogether disappear?—For how can it lose its rigor? Of course not by our bargaining any of its rigor out of it.—*The preconceived idea* of crystalline purity can only be removed by turning our whole examination round. (One might say: the axis of reference of our examination must be rotated, but about the fixed point of our real need.) (§108)

Both the *Tractatus* and the *Investigations*, according to Wittgenstein, treat the same problem—“the fixed point of our real need”—but rather than solve the problem of the *Ding*, by appealing to logic as the limit of language and world, Wittgenstein turns to ask how it is that the problem of the *Ding*—the desire for a logical metalanguage—troubles language.

Wittgenstein begins his *Philosophical Investigations* by evoking the problem of ostensive definition in Saint Augustine. “When they (my elders) named some object, and accordingly

moved towards something, I saw this and I grasped that the thing was called by the sound they uttered when they meant to point it out”(1). As Wittgenstein notes, the problem with this picture of how language works is that it seems impossible that Augustine could ever know what his elders were pointing at.

Now one can ostensibly define a proper name, the name of a color, the name of a material, a numeral the name of a point of the compass and so on. The definition of the number two, “That is called 'two'”—pointing to two nuts—is perfectly exact.—But how can two be defined like that? The person one gives the definition to doesn't know what one wants to call “two”; he will suppose that “two” is the name given to this group of nuts!—He may suppose this; but perhaps he does not. He might make the opposite mistake; when I want to assign a name to this group of nuts, he might understand it as a numeral. And he might equally well take the name of a person, of which I give an ostensive definition, as that of a colour, of a race, or even of a point of the compass. That is to say: an ostensive definition can be variously interpreted in *every* case. (§29)

It is precisely this scene that Lacan turns to in both his first seminar, *On the Technical Writings of Freud*, and in his third seminar, *The Psychoses*, in order to identify the problem of the beyond-of-the-signifier. In arguing for the necessity of a beyond-of-the-signified to ensure meaning, Lacan reminds his audience that “the trap, the hole one must not fall into, is the belief that the signified are objects, things”(32).

The signified is something quite different—it's the meaning, as I explained to you by means of Saint Augustine, who is as much of a linguist as Monsieur Benveniste, that it always refers to meaning, that is, to another meaning. The system of language, at whatever point you take hold of it, never results in an index finger directly indicating a point of reality; it's the whole of reality that is covered by the entire network of language. You can never say that this is what is being designated, for even were you to succeed you would never know what I am designating in this table—for example, the color, the thickness, the table as object, or whatever else it might be. (32)

For both Lacan and Wittgenstein, the critique of Augustine's scene of ostensible definition serves both to identify a specific fantasy of how language works, and to situate an approach to language as it operates outside of this fantasy.

Rather than propose that he, or Augustine, are merely wrong about how language works, Wittgenstein suggests that the fantasy of a metaphysical perspective emerges out of the texture of language. In the decimal expansion of Pi, Wittgenstein writes, it seems that “either the group “7777” occurs, or it does not—there is no third possibility.”

But what does that mean? –We use a picture; the picture of a visible series which one person sees the whole of and another not. The law of excluded middle says here: It must either look like this, or like that. So it really—and this is a truism—says nothing at all, but gives us a picture. And the problem ought to be, does reality accord with the picture or not? And this picture seems to determine what we have to do, what to look for, and how—but it does not do so, just because we do not know how it is to be applied. Here saying “There is no third possibility” or “But there can’t be a third possibility!”—expresses our inability to turn our eyes away from this picture: a picture which looks as if it must already contain both the problem and its solution, while all the same time we feel that it is not so. (*Investigations*, 352)

The question of whether or not the decimal expansion of Pi exists before it is written out leads Wittgenstein to suggest that there exists a metaphysical position—that of transcendental logic, of God—from the perspective of which the world exists as a totality. The seeming fact that the decimal expansion of Pi exists is presented as a picture that captures us, that “we cannot turn our eyes away from.”

Wittgenstein's solution to this problem—to the picture of language that captivates with its fantasy of a world viewed—is to return to the “rough ground”(*Investigations*, §107) of language, by listening to how language is actually used. Wittgenstein considers the feeling of intending to say something: “didn’t I intend the whole construction of the sentence [...] at its beginning? So surely it existed in my mind before I said it out loud!”(337). The only way to escape from this captivating picture is to return “intend” to its non-metaphysical use. As he writes, “here we are constructing a misleading picture of ‘intending,’ that is, of the use of this word” (337). Since, as Wittgenstein argues, it is only when the decimal expansion of Pi is granted existence, as pre-

existing structure (rather than seen as a sequence of numbers produced through a technical procedure of comparing the diameter of a circle to its circumference), it is therefore only when “intention” is removed from its actual use that metaphysics comes to inhabit language. “An intention is embedded in its situation” (337)—as, for example, when one intends to take out the garbage. The fantasy of a perspective, from which language can be taken as an object of intention, emerges, as a “grammatical fiction” when we remove “intending” from its everyday use. While Wittgenstein works to “clarify” how language works, dissolving metaphysical problems by returning pregnant metaphysical terms to their “ordinary” use, metaphysics is not merely a deluded perspective, that misguided intellectuals use to deform and pervert the normal functioning of language. Rather, the “grammatical fiction” of a metaphysical perspective imposes itself on us. Metaphysics, the search for the crystalline structure of logic as a guarantee for language, is not “our” dream, but, “as it were, a dream of our language” (358). It is not that Wittgenstein, in the *Tractatus*, made a mistake about how language worked, imposing some structure that is alien to language onto language. Rather, a certain activity of language fooled Wittgenstein. Both the *Tractatus* and the *Investigations* try to listen to how language works—only, in the *Tractatus*, Wittgenstein was listening to the wrong thing.

Against a reading of Wittgenstein where “ordinary language” is what ordinary people speak, while only sickly philosophers are troubled by metaphysics, Stanley Cavell writes, in his *A Pitch of Philosophy* that, while in the *Investigations* the everyday use of language is the cure for metaphysics, “the origin of the quotidian voice is a return from the metaphysical” (*Pitch*, 66). As Cavell continues, the problem of this notion of return is that “there is no ‘back’ to which to return” (*Pitch*, 67)—the ordinary, the everyday, does not become prior to philosophy, but is, itself, the product of a discourse. It is the other side of the thesis that there is no such thing as a

metalanguage. In these terms, the Investigations does not return to, but rather produces, “ordinary language.” For Cavell, that is, not only does metaphysics, as “a dream of our language” (*Investigations*, 358), emerge through a “misuse” of language, but ordinary language, the “quotidian voice,” emerges only through a mode of attention to a certain working of language. Rather than distinguish between two distinct levels of language, the Investigations explores the point at which these two levels of language—on the one hand a desire for the Other as the locus of intention, on the other the “quotidian voice” which finds the Other as a “grammatical fiction”—fold into each other. Whereas in the *Tractatus* Wittgenstein is fooled into thinking that the problem of the *Ding* can be solved, the Investigations listens to language as it is troubled by the *Ding*.

VI. Ordinary Language and *Lalangue*

As Wittgenstein distinguishes between the “grammatical fiction” of a logical metalanguage, and the “rough ground” of the ordinary voice, Lacan distinguishes between language and *lalangue*. Linguistics, which produces language as a law-governed field, is, Lacan writes, “the science that concerns itself with *lalangue*, which I write as one word, so as to specify its object, as is done in every science” (*Seminar XXIII*, 138). “Language is what we try to know concerning the function of *lalangue*” (138). *Lalangue*, that is, is equally the field of phenomena that linguistics works to colonize, to bring under the control of laws and rules, and the persistence of linguistic phenomena that cannot be described by the science of linguistics. Like the “rough ground” of Wittgenstein's ordinary language, *lalangue* appears only as a critique of the metaphysical.

In his *For the Love of Language*, the linguist and philosopher Jean-Claude Milner writes, echoing Wittgenstein's mystical argument in the *Tractatus*, that “whatever might be the interpretation or the power of a logical Language,²⁷ there exists at least one entity which escapes it, which is this Language itself”(103). A metalanguage is, in other words, unable to articulate itself. Milner continues that “To force this point of suspension, to want Language to take itself for its object is thus necessarily to reinscribe it on the side of the not-all, whose palpable form is the paradox”(103). If a metalanguage can describe itself, then the metalanguage exists within the world and is therefore not a metalanguage, but an object described by a metalanguage. Indeed, it is just in order to avoid this paradox that Wittgenstein is forced to exclude logic, itself, from language. Milner continues that “It becomes apparent by contrast that the Lacanian proposition, “there is no metalanguage,’ is immediately translatable as ‘there is something in language which is inscribed as the not-all,’ and consists in nothing other than an affirmation of the existence in Language of *lalangue*” (103). Just as, for Wittgenstein, the thesis that there is no metalanguage means that metaphysics is something assumed in certain words, when they are taken out of their situation, for Lacan, that “there's no such thing as a metalanguage” means that there is no such thing as being. “Being is merely presumed in certain words—‘individual,’ for instance, and ‘substance.’ In my view, it is but a fact of what is said” (*Seminar XX*, 107).

Like Wittgenstein, who writes that one is captured by a picture of the world viewed—the idea that “7777” is either already contained in the decimal expansion of Pi, or already excluded from the decimal expansion of Pi suggests that there is a perspective from which this infinite expansion can be surveyed —Lacan suggests that the fantasy that the world could be taken as a whole imposes itself on thought is an effect of grammar.

²⁷ Milner writes “Langage” with a capital “L” in order to signify a scientifically elaborated structure

The world conceived of as the whole, with what this word implies by way of limitation, regardless of the openness we grant it, remains a conception—a serendipitous term here—a view, gaze, or imaginary hold. And from that results the following, which remains strange, that someone—a part of this world—is at the outset assumed to be able to take cognizance of it. This One finds itself therein in a state that we can call existence, for how could it be the basis of the “taking cognizance” if it did not exist? Therein has always lain the impasse, the vacillation resulting from the cosmology that consists in the belief in a world. On the contrary, isn’t there something in analytic discourse that can introduce us to the following: that every subsistence or persistence of the world as such must be abandoned?

Language—the language forged by philosophical discourse—is such that, as you see, I cannot but constantly slip back into this world into this presupposition of substances that is permeated with the function of being. (*Seminar XX*, 43-44)

Against this belief in a world, in a One that has being, Lacan offers that “[o]ur recourse, in language (lalangue), is to that which shatters it (la brise)” (*Seminar XX*, 44). Lalangue frees us from captivation by the “picture” of belief in a world, by showing how the One—the basis for this belief in a world—emerges out of language, as “a fact of what is said” (*Seminar XX*, 107). Lacan, like Wittgenstein, finds the origin of the fantasy of the world viewed in a fact of grammar that imposes itself on thought. As Lacan writes, “Knowledge of the One turns out not to come from the body. The little we can say about knowledge of the one comes from the signifier ‘One’”(143). It is through a deceptively complex theory of knots that Lacan investigates the “One.” When Lacan introduces the borromean knot—where three rings of string are interconnected such that if one ring of string is cut, the other rings will separate—he is offering a surprisingly simple explanation of grammar. In the borromean knot, the function of each ring of string depends upon its relationship to all the other rings of string. In a grammatical sentence, function of each word depends upon its relationship to all the other words in the sentence. In other words, the “One” for Lacan, *is* grammatical structure.

Do you want an example that can show you what purpose can be served by

this line of folded knots that become independent once again as soon as you cut one of them? It's not very difficult to find such an example in psychosis, and that's no accident. Recall what hallucinatorily fills Schreber's solitude: "*Nun will Ich mich...*," "Now I shall...," or again "*Sie sollen nämlich...*," "You were to..." These interrupted sentences, which I called code messages, leave some sort of abeyance. We perceive here the requirement of a sentence, whatever it may be, which is such that one of its links, when missing, sets all the others free, that it, withdraws from them the One [*leur retire le Un*: takes their One away from them]. (Seminar XX, 128)

The "One," in other words, is a grammatical unity of the sentence. When this grammatical fact is taken up by philosophical language, the structure of language imposes itself on the world, such that the world viewed becomes a grammatical fiction. Whereas philosophy is captivated by the One, Schreber is captivated by the particularity of linguistic phenomena as it is withdrawn from the One. The psychotic, in Lacan's description of the mirror stage, "is so captivated by the image"(Seminar X, 142) that he does not find support for the particularity of his disordered experience in his mother's smile, such that "in the face of this phenomenon, his attitude is one of perplexity"(Seminar III, 53). Schreber's auditory hallucinations have the same structure. He is captivated and perplexed by the meaningless particularity of linguistic phenomena. It is in order to interpret these phenomena, in order to explain these fragments, that he produces a delusion.

This One, as that which is missing from reality, yet provides reality with its being, becomes another name for the *Ding*, for the beyond-of-the-signified. The "One," as grammatical form, exists, and is incarnated in *lalangue*, but is itself but a dream of language as it haunts language, gesturing towards the fiction of a being that it itself does not possess. As Wittgenstein's *Investigations* advocate a mode of listening, a listening to how is that metaphysics troubles the subject, Lacan's "*jouissance*," as the experience of the *Ding*, equally describes a kind of listening, a listening to the way in which the *Ding* appears, through the deviations that it introduces. Lacan writes that it is this sense that *jouissance* might be written as *j'ouïs-sens* (I

hear meaning). It is the same thing as hearing a meaning” (“*C'est la même chose d'ouïr un sens*”) (*Seminar XXIII*, 72-3). Psychoanalysis is not interested in referential language—the language of being—but rather works to recover the actual functioning of language.

For Lacan, the question is not why certain sick people feel that their body is parasitized by language—or, in Wittgenstein's terms, why certain people are afflicted with a philosophical illness—“the question is rather that of why a normal man, a man we call normal, does not perceive that the word is a parasite [...] that the word is the form of cancer that afflicts the human being” (*Seminar XXIII*, 95). Psychoanalysis thus works “to render this *jouissance*”—the *jouissance* that agitates in the parasitic word—“possible” (*Seminar XXIII*, 97). A first psychoanalytic moment comes as one lets “oneself be invaded by the essentially phonetic properties of the word, by the polyphony of the word” (*Seminar XXIII*, 97). At the same time that psychoanalytic listening works to expose this scene of *lalangue*, of the parasitic word, Lacan proposes that it is through this mode of listening that one can limit the action of *lalangue*, and can “free oneself of the parasitic word” (*Seminar XXIII*, 97).

VII. The Psychoanalytic Hypothesis

A certain critical labor of psychoanalysis involves recovering an experience, as a scene of disorganized linguistic phenomenon, haunted by the *Ding*, by the problem of the beyond-of-the-signified. Lacan argues that thermodynamic discourse, as a solution to the problem of the *Ding*, covers over this dimension of speech. In a second logical moment, however, Lacan appeals to the language of scientific discourse in order to enter into the field of *lalangue*, suggesting that both the subject and the unconscious are hypothetical.

Lacan writes, in *Encore*, that “if I have said that language is what the unconscious is structured like, that is because language, first of all, doesn’t exist. Language is what we try to know concerning the function of *lalangue*” (*Seminar XX*, 138). The unconscious, in other words, is a kind of knowledge about *lalangue*. As a language (whether the language of thermodynamics, or of linguistics) is a hypothesis about the phenomena that it considers, Lacan continues that “the unconscious, can only be structured like a language, a language that is always hypothetical with respect to what supports it, namely, *lalangue*” (139). The unconscious, like language, does not exist, but is, rather, produced as the effect of a discourse. From the fact of *lalangue*, Lacan proposes the hypothesis that there is a subject who knows how to use *lalangue*. “Stated otherwise, I reduce the hypothesis, according to the very formulation that lends it substance, to the following: it [the subject] is necessary to the functioning of *lalangue*. To say that there is a subject is nothing other than to say that there is a hypothesis” (*XX*, 142).

In these terms, the hypothesis that the functioning of *lalangue* implies a subject, is Lacan’s inaugural theoretical gesture. To say that the subject is a hypothesis, is equally to propose that there is a knowledge that resides in this use of *lalangue*, that the parasitic words that undermine knowledge are not merely an excess that must be guarded against, but the scene of a subject that can be brought into discourse. Lacan is claiming, in the spirit of Alexander Koyré, that a hypothesis does not emerge from evidence, but is, rather, a radical break from evidence. As Feyerabend writes, not only is a hypothesis “inconsistent with well established *facts*” (29), but “there is not a single interesting theory that agrees with all the known facts in its domain” (31). Indeed, the imposition of a hypothesis both calls for a radical reinterpretation of evidence, and the production of new evidence. The Copernican hypothesis, for instance, opposes itself to all the evidence that we have that the Earth stands still. Thus, as Paul Feyerabend suggests,

Galileo defended his Copernicanism not by introducing evidence, but by showing that one cannot trust evidence—to argue that the earth is moving, Galileo notes that when you walk home at night, it seems like the moon follows, always in the same place, over your shoulder. Yet we all know that the moon stays still: rather than dispute the evidence that the Earth is stationary, Galileo suggests that to enter into the field of a new hypothesis is to turn away from evidence. Not only does a hypothesis not emerge from experience, but it requires, through the production of a new experimental discourse, the production of new experience. Entering into this hypothesis, one then constructs experiments. As Koyré writes, “not only are good experiments based on theory, but even the means to perform them are nothing else than theory incarnate” (113). A new discourse appears as the effect of a hypothesis. Thus it is that within discourse, that appear as the effects of hypotheses, that science discovers its constants and laws.

For Lacan, a final horizon of the discourse of energetics from which psychoanalysis emerges, is the formal procedure through which a hypothesis frees itself from evidence, by introducing a new field. By virtue of the hypothesis that there is a subject of the unconscious, psychoanalysis establishes a discourse in which the analysand constructs the hypothetical object—the subject of the unconscious. Thus is it that Jean-Claude Milner can write, “[...] finally psychoanalysis only speaks of one thing: the conversion of each subjective singularity into a law as necessary as the laws of nature, as contingent as they are, and as absolute” (153).²⁸ In these terms psychoanalysis is a subjective science. It is not, as Lawrence suggests, a science that integrates the subject into reality, that solves the problem of the *Ding*, of the existence and coherence of the world, by presupposing that the natural world exists. Rather, psychoanalysis proposes the existence of the subject of the unconscious as a support for the working of *lalangue*.

²⁸ “Car enfin la psychanalyse ne parle que d’une chose: la conversion de chaque singularité subjective en une loi aussi nécessaire que les lois de la nature, aussi contingente qu’elles et aussi absolue.”

The unconscious, in these terms, is the minimum theoretical gesture, the minimum hypothesis, which allows the person to live in a language, in a world, troubled by the *Ding*.

Coda: Broken Bodies

For the authors I have considered here, thermodynamic discourse is the language within which bodies are broken apart and reassembled. The great hope, for both Pater and Lawrence, is that the language of transformative energies will provide a recompense for that which is lacking in an actual body. For William James, it is the language of thermodynamic equilibrium that preserves the body against excess, while for Lacan, it is only by separating the body from energetics that one can live with the fact of the fragmented body.

Pater begins *The Renaissance* with the story of Abelard and Heloïse. Abelard, the philosopher in whom “wisdom herself [...] seemed to sit enthroned” becomes Heloïse’s tutor. As they “refine a little further on the nature of abstract ideas, ‘Love made himself of the party with them’”(3). This “scholar” who “lived in a world of something like shadows ...who knew so well how to assign its exact value to every abstract thought”(4), wakes to the colors of the world when he encounters Heloïse’s “great and energetic nature”(6). It is only, however, once he is castrated by Heloise’s uncle, that Abelard is forced to commit himself to a literary life. His letters to Heloïse, written from his exile in England show a “wonderful outpouring of soul”(6). As Pater writes in “Style,” for the true artist, the literary work is not a mere structure, but “a body he has informed”(15). Abelard’s castration becomes the impetus for the construction of a new, literary, body. Pater’s thermodynamic aesthetic, in which the “heat” of the author’s experience is communicated to the reader, becomes a scene of transmission without lack, and a recompense for Abelard’s castration.

In Lawrence’s myth of Jesus / Osiris, Jesus arises from the tomb, castrated. However, when he encounters the natural sexual energy at work in the world—in the form of an “escaped

cock”—he is able to see that while the human is lacking, nature is not. Since “the universe flows in infinite wild streams, related / in rhythms too big and too small for us to know”(Poems, 479), it is only by accepting the limits of knowledge that he can fully participate in uncastrated nature. For both Pater and Lawrence, it is through castration that one becomes whole. However, for Pater it is a real castration that allows Abelard to prefigure the Renaissance, while for Lawrence castration remains a metaphysical affair, as one realizes that one does not possess one’s body, but rather that one’s body belongs to nature. Pater moves from the natural body to the body in the text; Lawrence suggests that one must give up the integrity of one’s own body in order to become part of the scene of flowing energies that comprises the body of nature.

For William James it is the hero and moralist who is able to bring equilibrium to the impulsivities of the will, and thus to preserve the integrity of the body. James tells the story of a “tippler...put into an almshouse”(1149), and thus deprived of rum.

Within a few days he had devised various expedients to procure rum, but failed. At length, however he hit upon one which was successful. He went into the wood-yard of the establishment, placed one hand upon the block, and with an axe in the other, struck it off at a single blow. With the stump raised and streaming, he ran into the house and cried, ‘Get some rum! get some rum! my hand is off.’ In the confusion and bustle of the occasion a bowl of rum was brought, into which he plunged the bleeding member of his body; then raising the bowl to his mouth, drank freely, and exultingly exclaimed, ‘Now I am satisfied!’(*Principles*, 1149-50).

It is the “diseased and impulsive will”(*Principles*, 1148) that would sacrifice the unity of the body in order to satisfy itself, whereas the healthy will, ruled by a spiritual force, maintains the body in a state of happy equilibrium. Against James, Wilde, Stein, and Nietzsche suggest that the chaos of the impulses, unstable and excessive, can never quite be brought into a state of control and balance by the conscious mind.

For Lacan, who would agree that the attempt to bring equilibrium and cohesion to the

body does not work out, the question is not that of how to avoid castration, by opposing a scene of castration to a scene of plenitude and balance, but rather that of how to sustain the fragmented body, the body as it resists interpretation. Lacan argues that the language of energetics assumes the existence and coherence of bodies, and thus condemns the problem of the fragmented body to silence. Lacan suggests that it is only by constructing a relationship to this broken body—by hypothesizing that the body, possessed by language, is the scene of the unconscious—that one can live with the fact that the body moves beyond control and without intention.

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