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The Lyric and the Lathe:

Dreams of Perfect Poetic Efficiency, 1800-1917

(TITLE)

ΒY

Steven A. Nathaniel

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

Master's of English

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY CHARLESTON, ILLINOIS

2015

YEAR

I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE



Abstract

This study examines patterns of efficiency in the poetry and theory of William Wordsworth, Hilda Doolittle, and other figures from the Modernist and Romantic periods. I begin by defining perfect efficiency as occurring when energy transforms, without loss, inside a closed energy system, and I offer perpetual motion machines as hypothetical examples of this impossible state. I then demonstrate the process of efficiency in William Wordsworth's poetry, which begins with circumlocutory poetic cycles but contracts into terse repetitions. Since technical efficiency is calculated by the formula output/input, poetry's subjectivity makes poetic efficiency difficult to measure. However, I suggest that repetitions offer an internal scale that compares efficiencies through relative concision. To address twentieth century poetry I begin with Gertrude Stein's notion of a "Portrait," which is an aesthetic closed system that nonetheless multiplies meaning through repetition. I then examine Ezra Pound, who led the Vorticists to implement a symbol of perfect efficiency, and, I discover that, just as vigorous and destructive vibrations arise in an energetic engine, Vorticism collapsed into chaos—not in spite of but *because of* its advocates' vehement assertions of order. Pound also showcases H.D.'s poetry as a triumph of the efficient Image, which is like an objectified emotion. As with Wordsworth and Stein, I identify H.D.'s repetitions, which signal, instead of the accomplishment of perfection, the process of efficiency. I conclude with the observation that efficient poetry does not denote concise poetry. I suggest that perfect efficiency demands the elimination of all disparate elements, eventually its beneficiary and even its creator.

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Chapter I. Perpetual Motion

"Oh ye seekers after perpetual motion, how many vain chimeras have you pursued? Go and take your place with the alchemists." —Leonardo da Vinci, 1494

In 1920 *Popular Science* vilified the machine that could run forever. Tinkerers, philosophers, and dreamers had rejected da Vinci's warning, and the optimistic pursuit of motion without end had endured to the twentieth century. Enthusiasm was perhaps at its apex, despite the developments of science, which had grown more adept since the Renaissance in their refutation of such devices. Notably the First (Clausius and Rankine, 1850) and Second (Clausius, 1854) Laws of Thermodynamics state that, within a closed system, energy cannot be created and entropy (disorder) inevitably increases. Yet schemers abounded despite these definitive laws that da Vinci had lacked. Devices featured in *Popular Science* include mechanisms that produce buoyancy under water, electricity from magnets, and torque from pendula. Philip Rowland writes "the old fallacy rises again," as if describing a weed, but the "insidious" inventions were not eradicated in 1920 either (26-7). Today the U.S. patent office is compelled to reject all applications for perpetual motion machines (without a working model) due to their profusion ("Utility").

The history of perpetual motion has largely been recorded by skeptics who, like da Vinci, disparaged those whom they perceived as foolhardy dilettantes. One notable volume, *Perpetuum Mobile; or, the Search for Self-Motive Power*, was published by Henry Dircks in 1861 when the scientific community had not yet disseminated the implications of thermodynamics; he concedes that despite pervasive criticism, it remained "an unsettled question whether Perpetual Motion is

or is not possible" (xv). Nonetheless Dircks concludes that perpetual motion is a vain pursuit and catalogues inventions that span centuries, describing and refuting them in turn.

Dircks describes one popular concept that involves a set of pendula pinned at regular intervals to the circumference of a wheel. The pendula are free to hang loose in the counterclockwise direction, but they are prevented, in the clockwise direction, from rotating beyond the position of a radial spoke. The concept assumes that the spokes on the right will generate a greater net torque than those on the left, thus propelling the



Figure 1: Perpetual Motion Machine (Dircks 50)

wheel. In fact, the torques of the pendula are always balanced, and motion may not be sustained.

The persistence of perpetual motion machines and the inevitability of their failure raise the question: what attraction do these impossible machines offer? Dircks suggests that "impossible" is precisely the attraction. He claims that "in action if not in words those who seek for this perpetuum mobile much as they desire to find it take no small pleasure in the endless contrivances it requires and suggests" (xiv). Yet this condescending diagnosis cannot account for the persistence of the inventors nor for reputable scientists' SURROUNDINGS interest in the problem. Dircks cannot but wonder at Edward Summerset's fascination in perpetual motion SYSTEM because the man's intelligence and scientific aptitude is manifest in his invention of one of the first steam engines (xxxvi). Dircks participates in a tradition of critical

assessment that wonders why and in receiving no



Figure 1: Closed System

apparent answer abandons the root of the phenomenon for the more hospitable inquiry of *what*: what has caused this or that machine to fail?

I am interested in the first question. Why does perpetual motion continue to attract tinkerers despite scientists' persistent injunctions? Consider the efficacy of a hypothetical, successful design. Perpetual motion machines attempt to remain in motion without energy input or output. This means that they are useless. They can accomplish no task but to persist. I suggest that this end actually joins the pursuit of perpetual motion to a larger and more pervasive ambition. Perpetual motion occurs within a closed system; it requires nothing from the outside; it feeds itself; it directs itself; it suffers neither decay nor loss; it lives forever. In perpetual motion there is a reiteration of the enduring, ubiquitous question of the eternal, the fodder of poets and artists since the beginning of recorded history. Yet the tinkerers do not arrive at this fanciful, even romantic, disposition by drifting away from the tenets of science, as their critics assert. Mathematics, physics, and thermodynamics testify to the impossibility of perpetual motion, but the tinkerers' aspirations are rooted in the idealization of these sciences, in simplified measurements that----to fit in our heads, our equations, our text books----shirk the complexities of the natural world. To identify this divergence between theory and praxis, I will briefly describe the scientific character of perpetual motion technologies, before mapping those same patterns onto the work of the supposed peddlers of fancy, the poets.

I have described perpetual motion machines as *closed systems*, and although this label finds applications in all disciplines, scientific and otherwise, I mean it to describe a closed energy system. A perpetual motion machine assumes a boundary across which no energy passes in either direction. Thus, the energy within the moving machine never varies in quantity, only in form. Consider the motion of a bouncing ball. If we simplify its physical translation, we may

understand its energy as oscillating between kinetic (speed) and potential (height) energy. At its zenith, all energy is potential, and at its nadir, all energy has transformed to kinetic. But a ball does not bounce in perpetuum because it is not a closed system. With each successive bounce, energy disperses as sound and as heat from friction. Although these outputs seem negligible, they are demonstrable by the ball's successively diminished maximum height and speed. This means that the ball's energy system is to some degree open. In all machines, such dispersals of energy are inevitable. For example, in the typical internal combustion engine found in automobiles, the chemical energy of the gasoline, once transformed by the various engine components, applies only about 20% of its original value as propulsion. This value is known as mechanical efficiency. Although realistic machines involve decreases in efficiency upon each transformation of energy, perpetual motion machines assume perfect transformations, and thus 100% efficiency.

Rather than dispersing energy to the outside environment, a perpetual motion machine theoretically transfers energy within its system without loss. In the machine from figure 1, the potential energy of the pendula increases as they rise with the wheel, then, as they fall, their kinetic energy increases, contributing to the overall rotational kinetic energy of the whole system. The allure of the design comes from the relative complexity of the mechanical balance; it is not immediately clear why the design will not propel the wheel indefinitely, or even at ever increasing speeds. The rotating pendula seem designed so as to obscure the central question of energy, whether it is retained or dispersed. Further, the complexity of the mechanism is not necessarily commensurate with efficiency or inefficiency. Thus, perpetual motion machines range in complexity, and that complexity is determined largely by each inventor's particular need to conceal from himself the futility of the design. Coupled with the fanciful allure I have

described above, the complexity of many machines implies that inadvertent deception arises between mechanic and mechanism. The former obscures the margin between perfection and utter failure within the gears, the levers, the weights of the latter.

Although it does not fit into the traditional definition of a machine, a spinning top might represent the simplest manifestation of energy retention. Its minimal contact with the outside environment permits it to sustain its motion for an extended period of time. The spinning top was aptly chosen for Christopher Nolan's film *Inception* (2010), in which the boundary between the perfect illusion and flawed reality hinge upon the collapse of a spinning top's motion. For the real top, the minor imperfections of the surface on which it spins and the minimal friction in the atmosphere stand beyond the limits of scientific measurement, so its mode of decay remains mysterious, even uncanny. Its simplicity mesmerizes. It is energy encapsulated (or nearly so).

In summary, perpetual motion machines involve the transformation and recycling of energy, such that none is lost. This energy retention constitutes a closed energy system. Further, the complexity of these cycles depends upon the complexity of the machine. Some perpetual motion designs involve dozens of transformations of energy (potential, kinetic, thermal, chemical, etc.), while the opposite extreme simply attempts to retain one form of energy that undergoes no transformations. We might orient these various designs on a geometric spectrum from a broad but complete circle to that circle's most extreme diminution, a singularity, as in the case of the spinning top.

The sustained interest in perpetual motion technologies, despite their impracticality, suggests that they serve some subtler interest. Most tinkerers are likely unaware of the allure of perpetual motion: the technology's practical value is nil, but the fascination remains. It seems that the appeal of perpetual motion lies beyond the grasp of the mind and beyond the

measurements of science. In this, perpetual motion shares more with a piece of art than with the products of industrial technologies. The opacity of the perpetual motion machine's design— especially to its designer—suggests that fascination lies not in the lucid algorithms of mechanics, but in the bountiful freedom of the unknown. Yet, perpetual motion machines do allow their creators to visit distant galaxies or delve deep ocean trenches; their freedom is not one of manifold experience, but quite the opposite. The efficient, closed system of the perpetual motion machine offers a freedom from determination and external influence. Perpetual motion is nothing less than the dream of perfect autonomy. A closed energy-system implies mechanical independence, but it also offers a model for social, economic, and political autonomy. Only through self-direction and self-propulsion does an object (or human) become its *own*, and perpetual motion offers this acute form of liberty. We can further conclude that efficiency is not a measure of the value of an energetic or industrial or human system; it is a measure of isolation.

I would now like to transfer these characteristics—circularity, efficiency, and perpetuity—to a seemingly dissimilar context. As I have claimed, efficient closed systems are not limited to technological applications, but resonate in various disciplines and in remote eras. To demonstrate the ubiquity of these systems and their implications, I would like to examine poetry for what it tells us about individuals' continuing fascination with the dream of perpetual motion. In particular I would like to examine poetic trends that correspond to developments within the Industrial Revolution and the rise of mass production. Although British Romantic writers seem to recoil from machinery and efficiency, William Wordsworth offers a set of peculiar poetic tendencies that challenge us to rethink the notion that Romantic poets were unconcerned with mechanical efficiency. In particular, his propensity for repetition has been held up as evidence that he stands far from the efficient mechanical processes of the Industrial

Revolution. I perceive quite the opposite in his collection, *Lyrical Ballads*. His cyclical patterns spiral inwards, as if to strip away all excess, until some idealized form presents itself as a short repeated phrase. This process that he demonstrates in both theory and praxis actually corresponds to the work of the lathe, a machine tool popularized during the Industrial Revolution that strips excess material via circular and restrictive motions. I posit that Wordsworth's poetic process and the work that proceeds from it resemble perpetual motion tinkering and its mechanical conceptions. Their interests lie in efficient loops that ultimately result from the pursuit of self-sufficiency.

In the third chapter I briefly investigate Gertrude Stein's poetry for evidence of a sustained pattern of poetic efficiency. To account for the substantial chronological gap between Wordsworth and Stein, I discuss the continuity of scientific principles that appear in the theory and poetry of each. Notably, I explain that patterns of repetition indicate the inadequacy of language for complete and sufficient expression within a closed poetic system.

In the fourth chapter I examine the Vorticist movement, which was led by Ezra Pound and Wyndham Lewis, and its dependence upon the analogy of the Vortex. I identify this analogy as a patent example of perfect poetic efficiency. Yet, I contend that the Vorticists' art never fulfills the ideal of their symbol and that instead their attempts to marry energy and order inevitably result in catastrophe.

I further investigate Pound and his involvement with the Imagists as a theorist and advocate. In Imagism, the ideal of perfect efficiency comes nearest to fruition, but I contend that the Imagists' concise poems do not necessarily denote efficiency as I define it. Rather, the repetitions manifest in Imagist poetry indicate that perfect expression cannot be achieved. As in

Vorticism, the nearer the poet comes to achieving perfect efficiency, the nearer the poem comes to overruling its participants, reader and writer.

I conclude my study by examining the dichotomy of broad and narrow efficiency. I oppose the notion that poetic efficiency depends upon progress from complex to simple poetic expressions. Instead, I define efficiency as progress from open to closed systems of meaning. I further suggest that progress from complexity to simplicity may cause unforeseen consequences, as in the case of Pound, whose desire for efficient poetry contributed to his later grand social delusions.

Chapter II. Wordsworth's Lathe

"We cannot but feel surprised how the idea of a self-motive mechanical power should have originated, or at what period it could have been called into existence. As emanating from the fruitful fancy of the poet or romancer, it may readily be conceived."

—Henry Dircks, Perpetuum Mobile (1861)

1. Writing in Solitude

Throughout the Preface to *Lyrical Ballads*, Wordsworth warily juxtaposes poetry with science. In contrast to the poet, the scientist "seeks truth as a remote and unknown benefactor; he cherishes and loves it in his solitude" (LB 271). Wordsworth's approximation of the scientist disregards, perhaps for the sake of contrast, the frequent collaborations between scientists in the nineteenth century. His notion of intrepid solitude actually better matches the work of the perpetual motion tinkerers than traditional scientific inquiry. As in contemporary research, nineteenth-century scientists rarely boasted of "truth" as a benefactor. Only those with the means to fund their own free inquiries could pursue such a lofty aim. The general unprofitability of perpetual motion likewise places its pursuit beyond the reach of the typical scientist who was and is still funded by grants, academies, or business enterprises. Further, Wordsworth creates an artificial distinction between himself and the scientist by imposing a sense of distance between the scientist and both truth and society.

The poet "[sings] a song in which all human beings join," Wordsworth claims. He then describes in contrast the scientist's "personal and individual acquisition" (LB 271); however, when Wordsworth describes the poetic process, there is little room for community. When he identifies a broad human chorus, he implies participation, communion in and through the song, but his descriptions of the poetic process preclude any meaningful input on the part of his

audience. In this way, the poet resembles his idealization of the scientist. Despite his insistence upon "common" language as a basis for Lyrical Ballads, when we examine the poet's medium, communal elements are scarce. And what is this medium? Wordsworth's eminent fount of "spontaneous feeling" comes quickest to mind, but it cannot in its spontaneity be the subject of the poet's labors. Either the overflow of feeling is indeed spontaneous or it is some kind of fickle but ultimately subservient tool. Certainly the latter would contradict Wordsworth's union of passions with the "causes that excite these," "the visible universe; with storm and sunshine; with the revolutions of the seasons" (LB 272). Elsewhere, too, feeling is described like nature's wild ambassador in humankind. Some critics have suggested that Wordsworth advocates a cooperative relationship with nature. For example, in *The Creative Imagination* James Engell claims that according to Wordsworth "our imaginations create and interpret nature, so in a simultaneous reciprocity nature channels the force of our imaginations" (269). However, this interpretation cannot be squared with spontaneity. Certainly Wordsworth yearns in his poetry and prose to commune with the natural world, but this turns out to be a meager conciliation. It is the midpoint in an impassible chasm, a paradoxical union of an unruly source of inspiration and his desire to fetter it. The fount of feeling must be beyond the control of the poet, at least at its source. With what, then, does a poet work? His qualification of the definition of poetry does not describe feeling but "thought" as the poet's medium:

For our continued influxes of feeling are modified and directed by our thoughts, which are indeed the representatives of all our past feelings; and, as by contemplating the relation of these general representatives to each other we discover what is really important to men, so, by the repetition and continuance of this act, our feelings will be connected with important subjects, till at length, if we be originally possessed of much

sensibility, such habits of mind will be produced, that, by obeying blindly and mechanically the impulses of those habits, we shall describe objects, and utter sentiments, of such a nature and in such connection with each other that the understanding of the being to whom we address ourselves, if he be in a healthful state of association, must necessarily be in some degree enlightened. (271)

Thought, the director of feeling, is also the summation of past feeling. It is composed of the spontaneous overflow but is distinct in the poet's retrospection. Wordsworth suggests that his personal reservoir of feeling, when contemplated at length, may create of itself productive descriptions and sentiments capable of enlightening others. What is conspicuously absent from this creative process is the participation of those with whom he purportedly sings. From the fount, feeling flows over, pools, and, without any identifiable tributaries, succeeds in both irrigating the region and perpetuating its source. Such a river, if it exists, is worthy of high esteem; Wordsworth does not withhold praise for poets. "Endued with more sensibility, more enthusiasm and tenderness, who has a greater knowledge of human nature, and a more comprehensive soul": here are a few of the poet's modest self-descriptions (269). Yet, beneath all this gilding, Wordsworth's theory has described the poet as a self-contained unit.

Isolation is a deeper theme, more entrenched even than the "tranquility" which Wordsworth invokes in "The Preface" (273). The Romantics' haunts—the spring glens, the serene riversides—intimate isolation in their poetry, but in Wordsworth, the theme permeates all aspects of his composition. Perhaps it is this icon of the solitary Romantic poet that has diverted critical attention from his theoretical juxtaposition of community and isolation. In "The Preface" Wordsworth has, I think, hidden the closed system of his writing process in plain sight, while, like a good magician, he distracts with comments on the inaccessible input of natural feeling and

the unnecessary participation of his audience. Thus he achieves the illusion of nature's independence and concurrent subservience. Applying the analogy of the closed energy system to these loops, I suggest that there is as much regard for efficiency in *Lyrical Ballads* as in the fruitless schemes of the perpetual motion tinkerers. In each, a perfect but narrow circle is the goal. In each, it is unattainable.

Many common characterizations of Wordsworth's poetry—as effusive, repetitious, and even tautological— problematize my associating it with efficiency, at least on the surface. One can and should ask how a poet who seems to spend many words on his subjects can be the precursor to minimalists and modernists in any sense. I claim that Wordsworth's closed system may also be found in poetry of the twentieth century and that his many words do not disqualify his poetry from the conversation of efficiency. Further, the concise language of the Imagists does not necessarily indicate efficiency. I would like to employ a geometric analogy to help explain what distinguishes Wordsworth as well as what places him in continuity with the later poets. A line with beginning and end can by rectilinearity (straightness) achieve a popular connotation of efficiency that I will henceforth refer to as "concision"-the shortest distance between two points is a straight line. But the technical patterns of efficiency that the Lyrical Ballads aspire to is another matter. The poetry that Wordsworth describes in "The Preface" advances only through circuitous motions: thought redoubling on itself. In practice, repeated words and phrases denote these redoubled thoughts, and the relative concision of the adjoining language denotes efficiency. Once a line is bent into an arc and then closed (through repetition), the resulting loop may be cinched tight until it is so narrow as to resemble the period on the page. I define poetic efficiency as the process by which looped language constricts, and the point about which language constricts represents the unattainable dream of perfect poetic efficiency. Thus,

Wordsworth demonstrates efficient patterns that range from the complex—like that of the perpetual motion machine featured in *Popular Science* that sought to transport citizens about a city indefinitely—to the simple, the spinning top. To ground these abstractions let us trace this relationship in the works of the poet from his Note on "The Thorn" where Wordsworth defines the terms repetition and tautology.

Wordsworth's poetry is replete with repetitions, and he defends these against accusations of tautology: "There is a numerous class of readers who imagine that the same words cannot be repeated without tautology: this is a great error," states Wordsworth (LB 351). We may conclude that for Wordsworth repeated words indicate language's lexical limitation, but not a point of semantic stagnation. He describes the alternative as "virtual tautology," which is "much oftener produced by using different words when the meaning is exactly the same" (351). This comparison suggests that Wordsworth believed that, in some cases, the repetition of the same words conveyed his meaning more effectively than greater lexical diversity. Corinna Russellⁱ identifies his theory as "a formula expressive of infinite repetition" (105). She acknowledges that if the poet discovers a line that through repetition enhances the poem's expression, then that same line would invite further reiterations. Yet, Wordsworth indicates that repetition never advances meaning to its intended destination. "Inadequacy," "craving," and "deficiency" are terms Wordsworth uses to describe a barrier against which the best poetry thrusts, riposte following riposte. Russell further hints that perhaps Wordsworth means that language always fails to completely express the poet's intent (105). It would seem therefore that language's shortcomings indicate an inaccessible destination. Thus the Preface to Lyrical Ballads declare the poet's intent: his circumlocutions return in tightening loops, each marked by repetition, but

eventually the adjoining language has all fallen away and he depends upon the repetitions alone to advance his meaning.

I would like to examine Wordsworth's Lyrical Ballads for four patterns that suggest a potent, underlying tendency towards efficiency. First, I will discuss the repetitions that mark each revolution of Wordsworth's thought. These repetitions resemble machinery in the most general sense; they assert rigid and regular delineations of time and space. Second, I will identify patterns of circularity, beginning with the accusation of tautology, but I will move beyond this accusation to demonstrate that Wordsworth's circumlocutions search (rather than wander) as they contract toward a desired but unattainable object. In this, his characters act like inventors seeking efficiency by shaving away the superfluous, iteration by iteration. It is for us to ask how these repetitions support his testimony of "apparent tautology." At the center of these contracting, circular motions, I will examine the singularities around which Wordsworth maneuvers. Like the laboriously tuned inventions of the perpetual motion tinkerers, Wordsworth's singularities mark progress's stagnation. I propose that we may associate these singularities with nearly perfect efficiency. Further, I explore the implications of the poet's deliberate erasure of the sweeping, natural vistas for which he is remembered. What gets cut away, and what remains? When nothing more may be removed, Wordsworth employs terse repetitions, which may be read as boundaries of meaning. I will discuss whether it is appropriate to regard these repetitions as indicators of perfect efficiency or of its impossibility. Ultimately, Wordsworth strives as the perpetual motion tinkerers strive: he grasps for the poetic line that is in and of itself complete.

2. Repetition

Wordsworth defends the apparent tautologies from "The Thorn" by reminding his readers that he portrays a particular character, a superstitious seaman, to examine the images about the thorn tree. This explanation may have prematurely arrested inquiries into Wordsworth's repetition, and so I would like to test his explanation against the progression of the narrative from "The Thorn" and other poems from *Lyrical Ballads*.

The apparent tautologies in "The Thorn" include Wordsworth's descriptions of the tree and the hill beside it. In one instance he binds two stanzas together through the repetition of "overgrown," which I read as a hint concerning a deeper function of repetition:

It stands erect, and like a stone

With lichens it is o'ergrown

Like rock or stone, it is o'ergrown

with lichens to the very top. ("The Thorn" 10-13)

Wordsworth's note claims that this repeated language is not redundant, but rather enhances meaning. It would seem that the repetition of "o'ergrown" then should be regarded like the practiced strokes of a woodworker; each pass is indistinguishable, but nonetheless enhances the work. I relate Wordsworth's poetry to the lathe, a machine tool that spins a "blank," a cylinder of wood or metal, at high speed. A gouge slowly progresses towards the object's center and thereby removes excess and forms circular contours of consistent diameter. As excess falls from the blank, the gouge must be adjusted according to the object's diameter. Thus, the blank transforms according to a reflexive and restrictive pattern. Most ornate table legs or bannister rails, for example, are produced through this process. Similarly, Wordsworth's repetitions

gradually draw nearer to expressing the essence of the object at hand that cannot be otherwise disclosed.

Later, he describes the mound beside the thorn. He regards the moss with particularly repetitious language that fails to add anything to the explicit description: "All lovely colours there you see, / All colours that were ever seen" ("The Thorn" 38-39). The slight adjustment in the phrasing adds nothing to the image, which is quite empty of detail; only a slight sense of movement occurs between the two lines; something has changed, yet the poet offers his reader no new imagery. The shift in voice between the two lines, from active to passive, and the suggestion of the eternal in the second line seem to pertain to the repetition's concurrent, limited and yet infinite, self-reference. Wordsworth only repeats "colours" once, but the move sets in motion what Russel names a "formula expressive of infinite repetition." "Colours" remain "colours," but their prolonged sameness thrusts the image beyond the accessible and experiential present and into eternal contemplation.

Because of repetition's suggestion of eternal contemplation, Wordsworth carefully chooses specific elements upon which to exert this repetitious attention. Which objects require this special poetic contemplation? In "The Thorn" the poet becomes caught up in these repetitions as he dwells upon various objects, and each seems to hold a special—but ambiguous—significance in the narrative. Each operates like an eddy in a stream, occupying the current for a moment, then releasing it. Yet, each momentary eddy implies the eternal contemplation I have described above. "The Thorn" manifests repetition especially when the speaker regards the tree, the mound, the lake, and the woman's cry, but elsewhere Wordsworth offers a simpler repetitious structure.

The conversation from "Anecdote for Fathers" oscillates between two poles, Kilve and Liswyn, each of which Wordsworth articulates with heavy repetition. In lines 27 and 28 he compares them as "Our home by Kilve's delightful shore, / Or here at Liswyn farm?" and shortly after in lines 31 and 32 he restates the choice as "Kilve's smooth shore by the green sea. / Or here at Liswyn farm?" Again, the phrasing varies slightly, but none of the alterations advance the reader's knowledge of either location. Certainly, Wordsworth elucidates the father's character through the rhetoric that encapsulates the repeated "Kilve" and "Liswyn," but I believe these repetitions may be read independent of their connective language. I would like to state plainly that a question is in no need of reiteration unless its original iteration is in some way incomplete. While the repetitions serve, in one sense, as vehicles into which the father can load his intimations, they also function as an autonomous signal of the futility of the father's rhetoric. The repetitions from "Anecdote for Fathers" exemplify such deficiency in meaning. When the father has exhausted his explicit comparisons between the two residences, he returns to his original, impotent labels. He grapples with the shortcomings of language, not through variety, but through stubborn repetition. It seems he can come no nearer to the distinction between Kilve and Liswyn, than their very names. In the end, his efforts to present the rich, sentimental content of the two abodes fails to reach his son. We might also regard this *slippage* in an industrial context. Like the transfer of energy through a machine, memory cannot pass from person to person with a high degree of fidelity. While the repetition between Kilve and Liswyn oscillates between two poles, elsewhere Wordsworth builds his repetitions upon a single word or phrase.

Wordsworth's interest in travelers and travelling brings an interesting correspondence between footsteps and poetic lines. In "Lucy Gray" the marks in the snow create spatial delineations that interact with Wordsworth's lines, and, without altering their course, drive the progress of the narrative. Thus Wordsworth employs one of the most curious phenomena in any narrative, the propensity of repetition to create drama:

And through the broken hawthorn-hedge,

And by the long stone wall

And then an open field they cross'd, The marks were still the same; They track'd them on, nor ever lost, And to the Bridge they came

They follow'd from the snowy bank

The footmarks, one by one,

Into the middle of the plank,

And further there were none. ("Lucy Gray" 47-56)

Footprints in the snow offer none of the particularities that one might expect if they had been created in dirt, loam, or mud. "One by one" the footprints repeat, without distinction, yet they succeed in leading the parents somewhere. Perhaps we might regard Wordsworth's repeated "And" (in five of the ten lines) as the manifestation of the footprints on the page. Each is preceded and followed by itself, in a sense, but their accumulation moves us nearer to the meaning that Wordsworth intends to disclose. Or are the footprints themselves the meaning? This question depends on whether Wordsworth offers a destination at the end of the repetitions. Perhaps we can state this question in a broader context, too. Perpetual motion requires inventors to trim excess from her machine and to streamline its processes. Perpetual motion cannot,

however, measure progress against a destination; each transfer of energy must end where it began. Instead, it is the concision of the cycle that determines progress.

3. The Inward Spiral

In his note on the "Thorn," Wordsworth evokes the familiar figure of a superstitious sea captain. Wordsworth's comments on the captain suggest that his superstitions cause him to invest inordinate meaning into the objects of his attention. I will begin my discussion of the circular "journey" with the suggestion that the repetitions from "The Thorn" do not function as if from the eccentric amplifications of the superstitious—the natural inflated with mystical meaning—but something nearer the opposite. Wordsworth's characterization suggests something like the obsessive logic that has been associated with seekers after perpetual motion. W. L. Duffvⁱⁱ investigates popular perceptions of perpetual motion from the nineteenth century and discovers that "in the degenerative, thermodynamic age, refusal to recognise entropy becomes powerfully associated with the subject's incapacity to recognise his inherent degeneracy" (163). Duffy explains that the principal sin of perpetual motion tinkerers is their refusal to acknowledge a complex system; instead, they over-simplify a complex thermomechanical system in order to create a trivial mathematical balance. Wordsworth's captain likewise narrows his inquiry progressively, even obsessively, until he may unite the several mysteries of thorn, pond, and mound in the singular, mournful utterance of the bereaved mother.

To put the distinction between superstitious eccentricity and logical fixation simply, one would expect a superstitious man to spiral outwards with increasingly fantastical imaginings, but Wordsworth's sailor spirals inwards, moving circuitously from thorn to pond to mound, gradually discharging his observations of the mountain vista, and eventually arriving at an impermeable mystery, articulated in two phrases: "Oh misery! oh misery! / Oh woe is me! oh

misery!" ("The Thorn" 65-66). Wordsworth moves from verbose circumlocutions to efficient repetitions.

In "The Idiot Boy" Betty's narrative spirals about the same despondent cry, "Oh woe is me !" ("The Idiot Boy" 272). Hers is a literal search through the woods that spirals towards a figurative destination, the loss of her son. Like the bereaved mother from "The Thorn," Betty never arrives at the complete articulation of loss. Her physical search correlates with her psychological anguish, contracting towards the truth but never arriving at it. When Betty's search trajectories sweep wide, Wordsworth offers his characteristic verdant panorama, but as she approaches the truth—too horrible to be fully realized—her broad circles collapse into tight reciprocations: Oh-woe-oh-woe. Consider the similarities between her joy and despair. "She screams—she cannot move for joy" ("The Idiot Boy" 383). Wordsworth's anaphora at the moment of the boy's return suggests that "she," Betty, is all. Thus, extremes of despair and joy are each marked by a kind of repetitious narrowness that dismisses the wideness of the wood and by paralysis removes the character from her setting.

Through anaphora, Wordsworth also winds tight his more lighthearted tale of "Goody Blake and Harry Gill." Repetition speeds up the narrative as Harry Gill stalks Goody Blake; the conjunction "and" binds action to action until he grabs her. Though this tale seems to find an end (to the journey) here, the repetitions never collapse into a conclusion. The inward spiral never finds a destination or an end-point at its center. Instead, the twist of fate, the exchange of chronic chills, demonstrates that Harry Gill has not in fact captured Goody Blake. She evades him because Gill's parsimony seals his own fate. Just as Gill's hands seek to seize the old woman, his teeth clench with his perpetual shivers. His blankets encircle him, bind him, isolate

him. He is neither struck dead nor redeemed through a lesson. He becomes fixed on the edge of each, where the reader may assume he remains.

Among the central objects towards which Wordsworth's poems often spiral, death is perhaps the most common. Like the fate of the Idiot Boy, the state of the child-speaker's siblings in "We Are Seven" stands always beyond reach. The narrative of the poem turns about the question of death, which, while remaining fixed and enwrapped in inquiry, the poet cannot reach:

"You say that two at Conway dwell,

And two are gone to sea,

Yet you are seven; I pray you tell

Sweet Maid, how this may be?" ("We Are Seven" 21-28)

The layered numerical repetitions answer the question "how many?" directly, yet they evade the implicit problem. Perhaps I can articulate the question that Wordsworth withholds from his speaker, "you are seven what?" The poet's discursive conversation seems to swing and miss at this point of uncertainty, time and time again. Through recycled phrases, the humanity of the deceased children hangs in a balance of proximity. They are at once inaccessible and eerily present. Thus the poet's inquiry seems to strike a boundary beyond which it cannot go.

When in "The Idle Shepherd-Boys" the young shepherds observe the product of their negligence, Wordsworth employs a figurative death that again involves the correspondence of circular patterns contracting towards a point. They spot a "Lamb, still swimming round and round" ("The Idle Shepherd-Boys" 76). It is important to note that the lamb is not the object of the poem, but the boys' negligence. Propelled by the water, the lamb circles what is superficially a vortex in the water, but what functions as a bodiless, voiceless accusation, one that transfers its pattern into the chest of the "challenger":

When list! he hears a piteous moan—

Again! his heart within him dies—

His pulse is stopp'd, his breath is lost

He totters, pale as any ghost. ("The Idle Shepherd-Boys" 60-63)

The heart does not stop from slow stagnation. Instead, the heart comes to a figurative halt because it is excited beyond its capacity. Its looped pattern narrows to a singularity. The powerful magnetism of this singularity binds all elements of the narrative together and causes the peril of the lamb to fall also upon the boy. He turns "pale" to match what conceivably is the color of the lamb. Thus Wordsworth moves from the pastoral tropes of countryside and untamed nature towards a point of desperate unity, all collapsing into all, where the unlike members of his narrative become alike.

4. Singularity

Wordsworth's broader patterns of circularity begin with wide and sweeping circumlocutions through pastoral or woodland landscapes, but they contract. He moves slowly inward towards revelatory or sublime or horrifying objects and eventually reduces his sweeping motions to tight repetitions. Yet, if we continue in this pattern of the inward spiral, will we not eventually find a center? In "The Old Cumberland Beggar" Wordsworth offers an interesting label for the place where nothing else can be stripped away. He idealizes the wanderer and offers a sort of benediction: "As in the eye of Nature he has liv'd, / So in the eye of Nature let him die" (188-189). Does the "eye of nature" suggest a destination or a journey in perpetuum?

Certainly it contains elements of both motion and stasis, both of which characterize the poets of this study.

In "The Idle Shepherd-Boys" Wordsworth may have hidden a clue that joins nature, repetition, and perpetuity. He describes the sheep-fold as a place where "the echoes play / a never, never ending song" (2-3). The synonym for repetition, "echoes," seems to ring into eternity. Elsewhere Wordsworth favors a singular sense of his poetic spirals' center. In "Nutting" he begins the poem by extracting the singular from the multiple: "It seems a day, / (I speak of one from many singled out) / One of those heavenly days which cannot die" ("Nutting" 1-3). A day that is one among many and yet eternal defies comprehension because its singularity and eternity create a paradox between them. In the lines from both "The Idle Shepherd-Boys" and "Nutting," repetitions become indistinguishable from singularities. The repetitions recur so quickly or seamlessly that they dissociate from time and place. They simply are. These singularities that exist at the center of many of Wordsworth's poems are quite familiar if we apply abstract labels to them. We might approximate them as grief, death, anguish, fear, love—the stuff of all lasting poetry. Each persists due to its universality and ineffability. But Wordsworth's peculiar proficiency is to articulate these tropes through repetition.

In "The Mad Mother" the speaker swaddles her child in numerous epithets including "Sweet babe!," "lovely baby," "my pretty thing!," "sweet baby," "my little life," and "my little lamb" (11, 15, 18, 22, 59, 71, 91). The repetitions in effect bind mother and child together, but they also establish a certain distance. The mother's fear prevents her from grasping the child with her language, with one name. Instead, she struggles to arrive at an appropriate title, one that could assure her that her child will never go away. She is as near as a mother and infant can be,

but she cannot penetrate below the skin, so to speak. There is a distance between them that she cannot conquer through her words.

The withdrawal of the object of passion from the speaker complicates the interactions that occur near the center of the inward poetic spiral. Wordsworth's speakers often flee it. For example, in "The Idiot Boy" the mother dedicates herself to searching, and one might speculate that she does so to avoid rather than face the truth concerning her son. In astronomic terms, she would prefer to remain in orbit than succumb to gravity and come crashing to earth. Similarly, in "Lines Written a Few Miles above Tintern Abbey" Wordsworth describes the relative freedom of his wider circumlocutions in contrast to, perhaps, the graver and interminable obligations of human society:

I bounded o'er the mountains, by the sides

Of the deep rivers, and the lonely streams,

Wherever nature led; more like a man

Flying from something he dreads, than one

Who sought the thing he loved. (69-73)

I do not mean to suggest that all of Wordsworth's poetry may be dichotomized as circuitous discursions in nature that are cinched into taut dilemmas of humankind. However, Wordsworth displays a certain resignation to the impermanence of the natural vista. Though he constantly enjoys the pleasures of nature for a time, he rarely comes to rest in their comforts at a poem's end. Instead, nature propels him onward (and inward).

When he names nature and the language of sense "the anchor of [his] purest thought, the nurse, / The guide, the guardian of [his] heart, and soul," Wordsworth does not mean by "nature" an level plain of feeling, but instead a gradient that directs his attention from objects of lesser to

objects of greater beauty ("Lines Written a Few Miles above Tintern Abbey" 110-111). "Anchor" aptly invokes the image of a ship that swirls here or there in the current but always about a single point. Despite the apparent freedom of the woods and fields, Wordsworth is bound to wander his way towards the center. Likewise, perpetual motion tinkerers might invest themselves in fantastical machinery, but if they are serious about their ambition they will proceed towards precision and efficiency. Once in that strong gravitational pull, Wordsworth's poetry often resolves in tight and narrow repetitions.

5. Closing the System

Wordsworth's inward spiral is particularly interesting when we consider his variously stated love of nature's diversity and complexity, breadth and depth. His poetry cannot help but become affixed to this or that image, and the culmination of his fixation necessarily corresponds to the erasure of this complexity. Where his poems arrive—that is to say the repetitions into which they inexorably settle—demarcate a sacred space that is set apart from his other sweeping descriptions.

In "Lines Written at a Small Distance from my House" Wordsworth describes the effect of a spring day in which each minute is sweeter than the last (2), and his ecstasy dwells on the trees, the mountains, and the grass, but inevitably his attention contracts on something less particular and more central. He cannot speak in any greater degree of specificity than "power." Moreover, he makes a pivotal statement on the relationship between this ineffable force that seems to fill the air and love:

And from the blessed power that rolls

About, below, above;

We'll frame the measure of our souls,

They shall be tuned to love. (33-36)

The soul, he explains, must be bound and framed if it is to embody love. The power does not disseminate the soul in nature as one might expect; instead, the power measures the limits of the soul. Apart from our understanding of the inward spiral, this juxtaposition of freedom and enclosure baffles. In light of these verses, the running and leaping that often appears in Wordsworth's pastorals must aim from the outside, inward. He does not search for something new; he searches for a way to seize and claim the heart of what he has already sensed. When we recall the closed energy systems to which perpetual motion aspires, the resemblance is profound. To the singularity at the center of Wordsworth's search, nothing can be added and nothing can be removed.

In "Matthew," which is otherwise titled "If Nature, for a favourite Child," Wordsworth again luxuriates in the experience of poetic contemplation. He joins motion and stasis, "still" and "round," which I have discussed as a characteristic of his repetition. Moreover, his language is that of consumption:

Yet sometimes when the secret cup

Of still and serious thought went round

It seem'd as if he drank it up,

He felt with spirit so profound. ("Matthew" 25-26)

Wordsworth is no simple observer. His contemplated thoughts give him access to something that he could not previously possess. I suggest that his dual interests in the complexities of nature and its consumable essence can only be reconciled in the closed system. In the closed system each element participates in its own sustenance, while in contrast the natural world seems full of creatures and forces of life that lead to and from the scope of observation; nature is a very

open system. Wordsworth's explanation of thought in "The Preface" as it relates to poetry indicates that thought is the discipline that binds together all the disparate and wild forces of nature for a concerted purpose.

Another place Wordsworth articulates the closed-system of his poems' centers comes in "Poems on the Naming of Places." Wordsworth unsettles the common critical interpretation that his primary interest was strictly to observe nature. He desired to possess it, too, if only in his mind. He says, "I gaz'd and gaz'd, and to myself I said, / Our thoughts at least are ours" (37-38). The repetition here should again be regarded as a signpost that indicates the poem is near the center of things, as Wordsworth sees them. The repetition of his gaze suggests that something that he hopes to possess eludes his perception. His consolation is that thought remains the possession of the poet, but the phrase's structure is tautological. In contrast to his impotent gaze, he claims his "thoughts" with a kind of anxious redundancy.

If we consider "gaze" and "thought" as two boundaries to the strange region that we have referred to as "the eye of nature," Wordsworth regards each in these two simple lines. The gaze concerns the meaning which is beyond the poet's power of perception (or power of articulation). The thought concerns the boundary between the fleeting, temporal pleasures—as are often manifest in the poet's landscapes—and the meaning that must be articulated through repetition. He sees what he cannot have, then reassures himself of what he can have. Wordsworth strikes an impenetrable barrier because his is an inwardly moving spiral. It cannot go further than the center: the perfect repetition can be trimmed to nothing more efficient than the perfect word, and even that seems unattainable.

In Wordsworth's conception, the poet's currency—we cannot help but continue vaguely referring to it as *meaning*—is not unlike the mechanic's. The perfect circular transfer of energy,

as around a perpetual motion machine's components, cannot occur in a world of friction and microscopic imperfections. Likewise, Wordsworth attempts to shave away the excess verbiage until he crafts a perfect phrase that contains a perfect feeling, but the meaning escapes him.

Wordsworth even perceives an array of fallacies, provoked by inefficiency, in a variety of disciplines. Each might be reduced to a fallacious belief in self-sufficiency. Here in "A Poet's Epitaph," he accuses the intellectual of cutting away all excess:

One to whose smooth-rubb'd soul can cling

Nor form nor feeling great nor small,

A reasoning, self-sufficient thing

An intellectual All in All. (17-20)

We might imagine what has been rubbed away from the intellectual's soul. Perhaps depth of feeling and a sense of wonder are missing. However, what is conspicuously absent from Wordsworth's list is an admonition for poets. He lionizes a rustic figure, and perhaps he intends to associate the poet with the humble country life, but Wordsworth's scrupulous search for *the center* makes a mockery of this conflation. I suggest that there is no better descriptor for Wordsworth's repetitious resolution than *self-sufficient*. His interest resembles the hyperbolic rationality of the perpetual motion tinkerer. Wordsworth finds a home for repetition, reduction, and efficiency; he hides them where they are least expected, among the pastoral scenes that by contrast attempt to draw attention away from the sooty factories of the cityscape. But the scenery can only distract from the intention of the poet-tinkerer, tinkerer-poet; their intentions are as one.

7. Wordsworth and the Machine

My redefinition of literary efficiency has up to this point defied the notion that efficient language is a matter of moving quickly from one place to another. Instead I have demonstrated Wordsworth's attempts to carve out truth with thought that is honed by repetition. I have suggested that the vital centers of his poems are also the most efficient in that they return to their subject rapidly even by the repetition of a single word. Wordsworth's rejection of the origindestination mode of truth-making sets a precedent for those following him. He employs an origin/destination-destination/origin process that progresses only by ending where it began. Despite Wordsworth's themes like the fantastical dynamism of nature in the *Prelude*, the patterns in his work lay the foundation for poets that would refuse effusive excursions of language, who instead hovered a hair's breadth above the truth's impenetrable surface, their language that of the deft, clean image.

The greatest challenge in my argument is to make the broad leap from efficiency as isolation of meaning to efficiency as concision of language. The first I have identified in the works, poetry and theory, of William Wordsworth, while the second I intend to identify in the modern poetry of the Imagists and Vorticists. Between these abutments I propose a span that is a transformation but also a continuation of one to the other. I do not intend to deal with the broad current between which is the profound inefficiency of Victorian poetry, but instead I will follow the evidence from Romantic to Modernist literature and see if they do not indeed meet in a theoretical if not historical middle.

Chapter III. Gertrude Stein and the Genealogy of Poetic Efficiency

"Emphatically may it be said of the Poet, as Shakespeare hath said of man, 'that he looks before and after."" —William Wordsworth, Preface to Lyrical Ballads

1. Efficiency and Concision

In his Preface to *Lyrical Ballads* Wordsworth prescribes a recycling of thought, a poetic process that bends back on itself and through accumulative cycles arrives at an ideal text. I have demonstrated the effects of this reflexive pattern in his poetry by tracing sweeping, pastoral circumlocutions, through ever-tightening spirals, towards a boundary of meaning that is marked by repetition. By moving from verbose to economic language, Wordsworth mimics the efficiency of the perpetual motion tinkerers, yet Wordsworth's seems a strange match for the poetry most associated with efficiency, namely that of the Imagists in the early twentieth century. Since I have redefined efficiency in terms of reflexivity and isolation, it becomes difficult to situate the later poetry in any kind of poetic genealogy of efficiency.

I would like to move from the early nineteenth toward the early twentieth century and determine whether Wordsworth's recursive and constrictive poetic patterns resemble the later poetry produced in the age when Henry Ford's assembly line first appeared and the automobile began to turn its engine. The Imagists associate terse language with the label "efficient," but, as I have begun to demonstrate, efficiency is quite different than concision. Ezra Poundⁱⁱⁱ bluntly associates short and long with good and bad poetry; he tells us that the Imagists are "in opposition to the numerous and unassembled writers who busy themselves with dull and interminable effusions" (126). Yet this statement offers less than the aesthetic justification that efficiency deserves. In this chapter I investigate the aesthetic theories of these modern poets for signs of a more robust ideology of efficiency. Further, I explain the Imagists' compulsion to
present only the succinct finished product, while Wordsworth inscribes the entire "engineering" process in his poetry—inefficiency carved away, cycle following cycle.

Rather than immediately attempt to bridge the substantial gap between Wordsworth and H.D., who is my representative of the Imagists, I would like to investigate briefly a third poet, one who offers similarities to the pair while maintaining an identity distinct from each. Gertrude Stein's Paris Salon often interacted with H.D.'s London Coterie, and the common thread between Pound and Stein—Cubism—warrants investigation. However, Stein's repetitive poetry strikes a sharp contrast with H.D.'s sense of concision. Wordsworth's refrains might better match this characteristic of Stein's, but his pastoral landscape seems to clash with her study of self-contained objects—and that is to say nothing of form. Of these seemingly disparate figures, I intend to uncover, beneath all the stylistic variation, an enduring affinity between poetic repetition and efficiency. First, I would like to examine Stein's work in light of my reading of Wordsworth's *Lyrical Ballads*.

2. Wordsworth and Stein

Stein's 1914 poetry collection *Tender Buttons* attends to objects, food, and rooms from a perspective that she professes to be Cubist. She chooses static topics, but she attempts to articulate, what she calls in "Portraits and Repetition," "vitality of movement, so that there need be nothing against which the movement shows as movement" (173). She dismisses all but the physical manifestation of these thematic subjects because she "was of course not interested in emotion or that anything happened" (191). According to Jamie Hilder,^{iv} "it is this same notion of movement that makes the application of the term 'still life' antithetical to the cubist practice. 'Still life,' as it refers to cubist painting and Stein's work in *Tender Buttons*, denotes not static objects of representation, but the condition of remaining alive" (79). Hilder examines Stein's

work at the intersection of stasis and motion. That work evokes some of the same effects I identified in Wordsworth's *Lyrical Ballads*, particularly those where tightening repetitious loops arrive at the boundary between the infinite and the singular. Ostensibly, both poets seek objects or approaches to objects in which "life" increases but motion decreases proportionally.

The title of Stein's theoretical essay—"Portraits and Repetition"—hints at one more critical principle that she derives from her sense of Cubism. She suggests that the assumed stasis of a portrait actually requires repeated engagement. She speaks of portraits as though they are in need of repetition, and repetition in its most austere signification implies that a first iteration was insufficient. Stein completed a portrait only when she "was emptied of saying this thing, and so no longer said what they were" (185). Wordsworth's reflexive thought processes return to an object in a similar fashion—and progress with a decidedly unscientific attitude—although he does not turn an object in quite the same way as Stein, who seems interested in an object's many facets. In the auspiciously named prose poem, "A Box," Stein examines multiple dimensions of the same object, a cigarette box:

A custom which is necessary when a box is used and taken is that a large part of the time there are three which have different connections. The one is on the table. The two are on the table. The three are on the table. (14)

The table contains the multiple facets of the box in much the same way the boundary of a perpetual motion machine's closed system inscribes its individual mechanical components. Although no box could place three surfaces into contact with a table at one time, Stein bends the logic of the geometry to emphasize the singular table's role in containing the box's plurality. In *Tender Buttons* Stein often obsesses over such instances of unified plurality. Her sense of plurality within a single "portrait" sets her poetry apart from some other more austere works of

the early twentieth century, such as those of the Imagists, but her interest in the boundary that establishes a portrait's external and internal content places her in conversation with others that employ an aesthetic "closed system."

Despite the important differences between Stein's *turning* and Wordsworth's *revisiting*, both poets *return* to their objects with the expectation of improved clarity. This coincidence provides a tenuous starting point for bringing into conversation Stein and Wordsworth: repetition comes to bear on objects that elude the first vision, but re-visions help them grasp the object. If Wordsworth and Stein aspire to the same sense of repetition, what can be said of the profound differences between their applications of the technique? In Lyrical Ballads, Wordsworth's repetitions mark the culmination of his poems, but Stein's function in the opposite sense. Hilder explains that Stein intends to "destabilise and de-centre traditional biases towards progress and perspective" (75). In Wordsworth we have observed an inward spiral that culminates in repetition: material falls away and loops decrease in breadth. By contrast Stein's poems seem to unravel about her repetitions: "Left open, to be left pounded, to be left closed, to be circulating in summer and winter" (15). The participle "left" suggests the box possesses a life of its own, beyond the impositions of the observer, stretching into the year. This diminutive object contains a whole spectrum of experience. But at the same time her repetition maintains the centrality of the cigarette box. It claims and reclaims the object. Certainly, Stein multiplies the box's postures----it remains neither open nor closed----but she also seals these alternate states within cycles.

Like Wordsworth, Stein employs repetition emphatically, but she seems to apply it indiscriminately. In a sense, she emphasizes everything. Her infinitives in "A Box," "to have corners, to be lighter than some weight, to indicate a wedding journey, to last brown and not

curious, to be wealthy," imagine the cigarette box in countless contexts and states of being (14). The effect is such that all hierarchical arrangements, all purposes and functions, that one expects become unstable and collapse under their own weight. Yet, she never escapes the implication that repetition binds together. For Stein, repetition communicates a unity that persists in spite of a portrait's limitless potential for creative interpretation.

Before I give proper attention to repetition as a self-sufficient structure, I would like to position Stein a bit closer to the recursive patterns we have observed in Wordsworth. One characteristic of her poetry wants better explanation. I have referred to the language by which poems link repeated words as loops, and, although I have explained that repetitions may be addressed independent of this language, loops determine the proximity of repeated words. Loops are at once an escape from and a return to repetitious language. Many artists of the early twentieth century expressed anxiety about repetition in daily life, and so, in context, Stein's loops demonstrate her ambivalence towards the patterns of mass-production she observed around her.

One of the challenges in bringing Stein into a discussion of efficient machinery is the anxiety modernist writers express concerning mass-production. While many modernists, including the Imagists, express their anxieties about industrialized culture by scorning repetition, Stein does the opposite. According to Michel Delville^v, Stein's poetry "appears as one example of how modernist aesthetics—despite its obsessive fear of repetition, routine, and habit and its equally obsessive emphasis on formal innovation—appropriated repetition and reiteration" (77). She upholds a model of a culture steeped in reproduction, and through her mimicry manages to refuse either to endorse or subvert the culture's rhythm. She incorporates machine rhythms into her work, even while denying the rhetoric of the glamour of machinery, such as those espoused

by F. W. Taylor in *Principles of Scientific Management* or in the Italian Futurist movement. Hilder identifies a number of compelling energetic phenomena for our critical conversation, each of which accomplishes Stein's subversion without sacrificing the energy she perceived behind her portraits: "the lack of such progression does not result in stasis, that movement need not be accumulative. Vibration, oscillation and *differance* are all movements without linear progress" (78). Hilder notably bridges the gap between geometric and linguistic schema with her reference to Derrida's concept of *différance*, which offers in its spelling an example of the divergence of phonetic and syntactic manifestations of a word. The singular phonetic form thus contains multiple syntactic representations. This relationship should recall Stein's multiplicity of meaning within a singular, closed system, or "portrait." Later, I will explicate vibration and oscillation as markers of efficient poetics in a post-Newtonian context. But they also appear in Wordsworth's poetry. "Oscillation" recalls a few of Wordsworth's works that revolve about two poles. For example, in "Anecdote for Fathers" Wordsworth's repetitions bind together while maintaining a sense of duality, much as the verses from "A Box" treat winter and summer.

Thus, Stein is not a proponent of machine-efficiency in a practical, industrial sense. Neither, of course, is Wordsworth. However, despite their antagonism towards the practical implications of productive technical systems, both poets incorporate the fundamental, driving force behind these systems that is reflexive and restrictive. They treat the objects upon which their poetry comes to bear with a determined narrowness of vision and revision that expects meaning to arise in proportion to that narrowness rather than in proportion to the breadth of attention that has often been attributed to them. Stein suggests that repetition—as a vehicle en route to a finite destination—is futile, while Wordsworth appears more optimistic, but these attitudes are secondary concerns to my study of repetition. The poets' recursive patterns remain

surprisingly similar. In a historical parallel, the first and second laws of thermodynamics divide tinkerers of the early nineteenth and twentieth centuries, and skeptics suggest that these discoveries should have disbanded the dilettantes, but the tinkerers' efforts were generally undeterred; they simply adapted from mechanical media to energetic media. Similarly, the poets participate in, respectively, mechanical and thermodynamic iterations of the same objective: Wordsworth traverses his environments, while Stein trades relative motion for internalized energy, but both sustain an ambitious pursuit of an isolated system that often exceeds the confines of scientific dogma. Opponents charge each poet with redundancy and undue wordiness, but both Wordsworth in his Note on "The Thorn" and Stein in "Portraits and Repetition" suggest that their objectives demand repetitive language. Both claim that repetition (what Stein names insistence) most nearly approaches their receding objects of attention.

As incongruous as any pair of poets might be, Wordsworth and Stein nonetheless offer noteworthy manifestations of repetition in their poetry. Moreover, each poet wrote in a historical moment during which technology and scientific innovation profoundly affect the artistic and literary spheres. According to Steven Meyer in *Irresistible Dictation: Gertrude Stein and the Correlations of Writing and Science*, "Wordsworth's poems, like Stein's compositions, may be regarded as experiments [...] designed to convey and in the process account for individual phenomena of human consciousness in terms of more general principles or mechanisms" (36-7). Meyer does well to capture the inventiveness of these poets. They understood the messiness of trial and error in the empirical method and refused to erase the complex processes through which they arrived at (or near) their objectives. I certainly do not mean to delimit Wordsworth or Stein with the label of scientist or empiricist; they certainly defied many principal statutes of contemporaneous science. Neither am I interested in investigating in full depth these poets'

complex relationships with science. Instead I would like to focus exclusively on the science demonstrative of these poets' common understanding of restrictive and reflexive poetry.

3. Enlightenment and Science

Wordsworth's close association with unfettered nature and Stein's marked institutional subversions make both unusual candidates for the influence of science. Their cultures' generally favorable dispositions toward science induce a range of reactions in the poets. At times they act antagonistically toward the scientist and his work, while elsewhere aesthetic theories express ambivalence—such as Stein's application of "radical empiricism" or Wordsworth's sense of thought as a "general representative," which might be thought of as like a scientific law of feeling (*LB* 271). The implications of Enlightenment—particularly Europe's incorporation of the scientific method in remote facets of life—stretch from the seventeenth to the twentieth century, and its influence on efficiency profoundly affects the poets that incorporate its principles in their writing.

A pivotal moment in what is often referred to as the second industrial revolution, The Great Exhibition (1851) marked a transition in industrial technologies. Before the exhibition, engineers designed machinery with the intention of replacing manual labor (which was still seated in local economies) with machines, but following the exhibition they began to design tools of mass production. While inventors presented many novelties in London's Crystal Palace, perhaps the most novel innovation was the ideological axis about which the event rotated. Machines would not just improve industry; they would perfect it. According to Evelyn Cobley in *Modernism and the Culture of Efficiency: Ideology and Fiction*, the sentiment at the heart of the exhibition uplifted "the nineteenth century as the fulfillment of the Enlightenment legacy, which held that the taming of nature through the application of reason would result in the

perfectibility of humankind" (28-9). As I have argued, Wordsworth's poetry begins with discursions in nature, but ends with near-mechanical cycles; I would like now to investigate empiricism's best kept secret, its demand for a necessarily unscientific guiding force, namely Enlightenment. First, I would like to address the subtle influence of scientific progress that positions Wordsworth within a lineage of writers through whom the implications of efficiency and repetition play out, extending from the early nineteenth, into the twentieth century, and beyond.

What is important to note of Wordsworth's convoluted associations with science is that his interest is less in the details that constitute empirical investigation, and more in the fundamental patterns that underlie the particular. According to Geoffrey Durrant in Wordsworth and the Great System, "The imposition of 'order and relation,' is as much a part of Wordsworth's poetic genius as his capacity for patient observation" (23). Durrant reads Wordsworth's poem "Water Fowl," in which a mass of birds undulates in the sky, and detects a surprising detachment from the objects that compose the scene. Durrant explains that "life appears as a pattern woven between earth and sky by the interplay of vast and ultimately simple forces" (45). Here, Durrant employs the word "life" in an abstract manner because Wordsworth's poetry often aspires to vast and yet unintelligible forces. This appeal to underlying energy, which remains just beyond the edge of articulation, is something we will see in each of the exemplars of poetic efficiency. Wordsworth's central compulsion often eludes readers because he reaches for the energy with which nature is inextricably mingled. For example, he clothes with unstill water the momentum that impels it in "The Idle Shepherd-Boys." The lamb rides the swirling currents "round and round," but it is the lively, energetic current that resonates with the poem's emotional tenor (line 76). I should note that, despite his interest in the energetic movement of his subjects and

objects, Wordsworth's attention comes to bear on something quite similar to Stein's sense of energetic stasis. This characteristic of Wordsworth's poetry can hardly be called "scientific" because it depends upon a rather imprecise concept, energy.

Although Wordsworth's interest the nebulous idea of "energy" might indicate an amateurish interest in science, his relationship with the spirit of Enlightenment was anything but simple. In Wordsworth and the Enlightenment: Nature, Man, and Society in the Experimental *Poetry*, Alan Bewell lays out a case that the poet's work can be interpreted as a kind of anthropological endeavor that mediates the religious and scientific narratives of his time. Bewell perceives in Wordsworth a series of redefinitions-of poetry, of myth, of religion, of deathpatterned after the "moral science" of the Enlightenment (19). In this, Wordsworth denies the primacy of both religious and scientific knowledge, and he integrates them, placing instead the poet in the seat of power. Bewell suggests that "Wordsworth supplies an alternate center [...] by tracing all religious beliefs back to a primal source in the mysteries of a mind that shapes itself out of its contact with nature" (138). Here he correctly identifies Wordsworth's medium as his mind, rather than the nature with which he makes contact. What is remarkable about Bewell's conclusion is that he recognizes that Wordsworth is carving out a new niche which mediates but also trumps the religious and scientific poles of his day. Wordsworth's third position can be described as neither scientific nor religious, but it certainly contains elements of each.

Wordsworth's poetry relates to the Enlightenment in more than an anthropological sense. "Prophet of the past" is the title Bewell bestows on him, suggesting a form of empiricism as the poet's method (43). But through his reflexive mechanisms Wordsworth also becomes a historian of the future. Although Bewell does move beyond anthropology when he describes how Wordsworth "mythologizes," he stops short of arriving at the poet's true mode of revision.

Bewell leans on an unspoken definition of Enlightenment that confines it within the scientific method by concerning Wordsworth's poetry only with measurable phenomena and so with the past, but Enlightenment should never be mistaken as synonymous with the scientific method. Bewell's blind spot finds articulation in the theories of Theodor W. Adorno and Max Horkheimer's *Dialectic of Enlightenment*. They distinguish between science and its director, Enlightenment, explaining that "Science itself is not conscious of itself; it is only a tool. Enlightenment, however, is the philosophy which equates the truth with scientific systematization" (85). Bewell perceives Wordsworth rewriting the past by imagining its poetic alternative: he stands in the past and looks forward. If so, the poet would suffer the constraints of any scientist, which are the shackles of what has been. Yet Wordsworth has appropriated the complete spirit of his age, the enlightened spirit, which extends above and beyond empirical methodologies.

Adorno's and Horkheimer's observation helps pin down the error in reducing visions like Wordsworth's to something experimental and dispassionate when they state that "the notion of the self-understanding of science contradicts the notion of science itself" (85). Since science attempts to derive the truth from measurable phenomena and without the taint of self-interest, the scientist cannot observe himself (and remain a scientist). As I have argued, Wordsworth manipulates the natural by first manipulating his accumulated thoughts. Since he claims and practices self-reflection as his fundamental mode of composition, Wordsworth cannot (only) mimic a scientist, a prophet of the past. He passes beyond the bounds of the observable through his imaginative exploits into the future, such as that in "The Fountain":

"Down to the vale this water steers,

How merrily it goes!

'Twil murmur on a thousand years,

And flow as now it flows.' (21-24)

Wordsworth employs repetition to draw the present into that future vision. In the repetition of "flow" the present becomes the future through self-assertion; in repetition the present exists as an accumulation and a reincarnation of the past. Repetition binds together, not unlike the (then) novel steam-powered loom, which gathered long cotton threads to circular bobbins. Although the spooling bobbin seems an inversion of my earlier analogy of the lathe, I suggest that independently they offer a limited picture of efficiency. Both the elimination of excess (on a lathe) and the unification and collection of disparate elements (on a loom) illuminate a process that begins with the diverse multiplicity and ends with the singular unity.

Science also influences Stein's conception of poetics. Her research at the Johns Hopkins Medical School undoubtedly informs her propensity for observation. Meyer recognizes that Stein's departure from formal scientific study does not indicate vehement opposition, but rather a revision of its principles. Meyer describes her intellectual and aesthetic maturation carefully, explaining that "although she characterized the shift as a wholesale rejection of science, it actually only represented a disillusionment with the dominant vision of science" (4). Her innovative approach to science finds space for what has for many critics come to define her poetry: self-reference. Meyer reads Stein as an advocate of William James's sense of "radical empiricism," science that incorporates experience into its interrogative methods. In this he places Stein and Wordsworth together and sets them against logical positivism, such as that advocated by Bertrand Russell. Meyer employs a pair of terms to distinguish between science that attempts to divorce the influence of the scientist and his object, "knowledge-about," and science that embraces the influx of the observer's experience, "knowledge of acquaintance" (16). Stein and Wordsworth, of course, subscribe to the latter conception.

In the Preface to *Lyrical Ballads*, Wordsworth predicts that science will put on "flesh and blood," an observation that in itself associates Wordsworth with something much nearer to "radical empiricism" than its traditional forms. Steven Meyer explains that Wordsworth

turn[s] the tables on science, as it were, analyzing the analyst with his own instruments— [which] holds for any empiricist method, including that of evolutionary science, because ordinary empiricism, unlike radical empiricism, requires that one divorce the pursuit of knowledge from one's emotional investment in the procedures one has come to follow

(11).

Wordsworth defies this surprising effort to separate scientist and science by stirring his experience into processes that, nonetheless, strongly resemble the scientific method. The most elegant and decisive acts of this infringement come through repetition. In repetition he leaps forward into the unknown and untested—necessarily unguided by reliable experimentation then draws closed the void between, future collapsing into present. Only repetition offers such a bridge. Whereas the scientific method assumes repetition resolves in quantifiable meanings, Wordsworth's sense of repetition records a temporal process.

I claim that by accepting the poet's influence in the knowledge they seek, Wordsworth and Stein facilitate the intersection of repetition and efficiency, but before I fully illustrate that important juncture, the tenuous language upon which I have built my explanation requires precise definition. As I noted, critical attention to repetition has too often depended upon analysis of the language that enfolds it, but its attributes may be studied on their own, and these attributes compose the cohesive thread that links the poets in this study.

4. Which Repetition?

We have up to this point examined Stein's sense of repetition briefly and Wordsworth's in greater depth, but the question remains of whether we may associate these occurrences that in practice appear quite distinct. By defining repetition with greater precision, I hope to approach the larger question of its relationship with efficiency.

Wordsworth and Stein seem to imagine two very different techniques when they refer to repetition in their theoretical works. Wordsworth develops his sense of repetition in contrast to tautology: tautology involves proximate language that conveys redundant meanings, while repetition's identical language builds upon itself to cause a change in the reader's perception. Gilles Deleuze contends with this fragile distinction in *Difference and Repetition* (1968). Deleuze actually helps makes sense of Wordsworth's attempt to mediate religion and science when he explains that moral and natural laws demand habits of their participants, but inevitably fail to achieve repetition (achieving resemblance instead): either the habit's action is constant and its intention changes, or its action changes while its intention is constant (5). True repetition requires a consistent intention to provoke consistent actions. Here, the emphasis upon consistency should recall the properties of a perpetual motion machine. According to Deleuze's definition, repetition seems an impossible feat, but, nonetheless, Deleuze finds evidence drawing from the philosophies of both Søren Kierkegaard and Friedrich Nietzsche, that repetition is perhaps the highest aim in representation.

Stein complicates these definitions by renaming Wordsworth's sense of repetition "insistence" because "its emphasis can never be repeating, because insistence is always alive and if it is alive it is never saying anything in the same way because emphasis can never be the same" ("Portraits and Repetition" 171). Here, she agrees that consistent habits and consistent

objectives constitute true repetition (insistence), but she also integrates the observer of repetition into the conversation. Deleuze concurs, explaining that "the paradox of repetition lie[s] in the fact that one can speak of repetition only by virtue of the change or difference that it introduces into the mind which contemplates it" (70). Because emphasis can never be the same, Stein also doubts that repetition—which she defines in terms of a static observer—is in fact possible. So, despite their idiosyncrasies, Wordsworth and Stein agree that repetition involves consistent phrasing that changes the reader's perception, but they also agree that it aspires eventually to evoke a consistent response in the reader.

I should note that Adorno and Horkheimer draw another sense of repetition into the conversation. They define science as "repetition, refined into observed regularity, and preserved in stereotypes" (181). They apparently thwart my dissociation of science and repetition when they define science this way, but again the semantics tangle the relationship. We must again distinguish between Deleuze's sense of repetition that excludes resemblance and the sense used in Dialectic of Enlightenment. Deleuze addresses Adorno and Horkheimer's sense of repetition, which actually involves instability of "habit" on the part of the scientist. Deleuze suggests that "phenomena necessarily appear as equal to a certain quantitative relation between the chosen factors" (3). In other words, the scientist's object of study is not in fact replicated but transformed when its characteristics are measured quantitatively. Here we recall the tautological patterns Wordsworth ascribes to his critics (LB 341). He decries their use of different phraseology to accomplish the same meaning. In a similar way, scientists are not repeaters but representers, transforming inaccessible objects into compliant data. Thus, Wordsworth, Stein, and Deleuze—a comically incongruous assembly—all agree that the artist, and not the scientist, is the sole purveyor of true repetition and that repetition stands near to the edge of impossibility.

Despite the disparities in Stein's and Wordsworth's styles, they define the characteristics of repetition (insistence) in a Deleuzian sense, a definition which sets them at odds with the scientific method. Neither regards their objects with finitude, but they still attempt to access them through repetition. Although they refuse to endorse positivism through their art, they draw on scientific backgrounds and the scientific laws that imbue their objects with such vital energy. In Wordsworth we have discovered some likeness to the work of perpetual motion tinkerers, but we have not yet reached Stein's and Wordsworth's definitive, shared sense of efficiency. To complete this aesthetic bridge I would like to examine some of the scholarship that addresses twentieth-century efficiency and work back towards these poets' sense of repetition.

5. Comparative and Reflexive Efficiencies

Like repetition, efficiency seems an accessible concept but upon closer inspection eludes easy definition. Criticism across many disciplines casually applies the elastic label, "efficient," to both technical and literary texts in both the nineteenth and twentieth centuries. In the introduction to her study, Evelyn Cobley offers a concise explanation for an engineer's assertion of efficiency:

What counts for us is how successfully an engineer is able to minimize waste and to increase the ration of useful energy to be squeezed out of a mechanism. It is not the static balance between output and input that fires the cultural imagination but the dynamic desire to increase the total output of machines at all cost. Efficiency is thus marked by the lure of a perfectibility remaining always out of reach. (8)

Here, Cobley corroborates the narrative that I have proposed thus far. "Perfectibility" evokes Wordsworth's repetition and the squeezing recalls his inward spiral. However, Cobley's scholarship examines efficiency from the outside of its self-imposed closed system. She

approaches efficiency through its advocates, Henry Ford, F.W. Taylor, and Rudolph Höss, and she begins by explaining the social and historical contexts of their ideologies. Her movement from context inwards offers a limited perspective on the processes by which efficient systems come to be. Rather than considering the rigid cinctures of an efficient system from within, she stands outside where she can only observe the waste fall away from its process.

This error in strictly externalized analysis presents itself in Cobley's close readings. For example, she measures the efficiency of one character against another in Ford Maddox Ford's The Good Soldier: "Leonora seeks to defend her husband's protectionist traditionalism with efficient measures that make her the ideological carrier of the very bourgeois capitalism he resists"; Leonora is more efficient than Edward, she concludes (238). In this comparative character analysis, she departs from her apt description of an efficient system as "a utopian model mobilizing ceaseless efforts to contain and close off a process that has neither beginning nor end" (9). According to this definition, a more probing analysis of Leonora would conclude that Leonora's present state was more efficient than her past. I do not deny the value of critiquing efficiency comparatively, for example as a business's means of achieving leverage over a competitor, but the self-referentiality of an efficient system relegates these external comparisons to a secondary or tertiary importance. Later Cobley criticizes Jennifer Karns Alexander's *The Mantra of Efficiency* for "isolating a machine from its social context [so] that it can be deemed a static totality" (9). Yet a perpetual motion tinkerer intends his machine for this very purpose. Considered simultaneously, Cobley's positions suggest that we may fully understand an efficient machine by examining only what is left outside of its self-imposed isolation. I object to examining efficiency only in terms of its historical and social contexts, especially because efficiency effects its own isolation.

Coblev finds that "even in its technically most restricted sense, efficiency is always a comparative measure" (Cobley 9). I agree with this general conclusion; because technical efficiency in a closed system varies between 0 and 100%, two instances of technical efficiency may be easily measured against one another, but, as I argue, *literary* or *poetic* efficiency does not submit to measurement so easily. Yet Cobley's analysis does not falter due to the subjectivity of comparison. The principal flaw in comparative analyses of efficiency is that they divorce the subject and object of the "lure" of efficiency by assuming two adjacent but independent actors. Instead, efficiency involves actors that are contained one within another. Every instance of efficiency involves internal referents, comparisons of past to present to future self. Although one efficient entity may provoke another towards greater efficiency---Toyota is pressed towards greater efficiency by Hyundai's success—the primary comparison always remains internal. I suggest that efficiency is best understood as a system redefining itself through a restrictive, reflexive process. Coblev has thoroughly examined efficient systems from the outside, but she has been forced to disregard their self-imposed sequestration in order to orient their enactors historically and culturally. Alternatively, I hope to crawl inside this space and test its properties and only then perceive the encircling social structures as the poets perceived them.

Although the implications of comparative efficiency deserve attention, I am more interested in the reflexivity of efficiency, which is where it meets repetition. The importance of internal reference also calls into question the importance of social context. The poets in this study attempt to erase their social context, rather than respond to it. For example, in "A Box" Stein regards the cigarettes as tools for the measurement of the box an object in itself, rather than a product of any kind of external determination. Her repetition of "cigarettes" asserts the energetic character of the box, while denying any external referent: "cigarettes do measure an

empty length sooner than a choice in color" (Stein 15). Cigarettes measure the character of the box, which is their system's boundary, but the "choice in color" denotes the participation of some external and thus unknown person. This boundary between internal and external reference should call to mind the closed systems at work in perpetual motion applications. Only an impermeable boundary can elicit the perfect efficiency of perpetual motion, and Stein attempts to fashion a similar boundary. According to Meyer, "Stein's compositions are especially interesting in this regard because she so successfully rid them of overt literary allusions, among other forms of referentiality" (xvi). To study the absent *chooser* of the cigarette box's color, their motivations and contexts, would obviously be a frivolous endeavor, but much critical attention to efficiency has proceeded in this way. I intend the alternative, which searches for "the measure" of closed-system boxes, not without but within that box.

Once again, I will note that neither Wordsworth nor Stein exhibit efficiency in a comparative sense. I do not mean to say that they were not affected or even determined in part by their social circumstances, but efficiency as they intend it and employ it is best understood as a reflexive act. When critics use the word "efficient" with regard to literature, comparative efficiency offers much less than it seems to. Consider Ezra Pound's "In a Station of the Metro." Pound showcases his fourteen words as a triumph of efficiency, as have many critics since, "the apparition of these faces in the crowd / petals on a wet, black bough," but literature fails to submit to the typical measure of efficiency. Even if we measure Pound's "input" by counting the number of words in his poem, its "output" evades any measurement, quantitative *or* qualitative, and disables the elegant formula, efficiency = output / input.

Here, we are actually quite near the intersection of repetition and efficiency. Because the reader's subjective experience obscures any definitive "output" of a poem beyond hope of

measurement, a poem must establish the criterion for efficiency within its text; a poem must assert an internal objective frame against which it can measure its output. This task then becomes swallowed up in the paradoxes of reflexivity: can any objective frame measure itself? Deleuze concludes that "we do not contemplate ourselves, but we exist only in contemplatingthat is to say, in contracting that from which we come" (Deleuze 74). His answer is yes and no. Self-reference does not lend itself to the periodic oscillations between observation and mediation that "contemplation" implies. Here and throughout Difference and Repetition Deleuze uses the word "contract" in both of its contemporary senses. A contract both binds its parties and collapses them, one into the other. The centers of Wordsworth's spirals function this way. blurring the distinctions between cycles and singularities. For Deleuze, the components of the process of iteration and reflection are indistinguishable. Thus, repetition offers the only source of objective valuation for a poem; it is both object and objective, measuring itself against itself. All other criteria for measuring "efficient" poetry submit to the whims of subjective readership. In fact, many pronouncements of efficiency reveal themselves to be subjective posturing under closer scrutiny. Pound's acclamations mostly go this way: today we should conclude little of his short "In a Station of the Metro," except that it is short. But nonetheless the label of "efficiency" becomes clumsily stirred into banal discussions of comparative concision and detached from the profound implications of efficiency's self-referentiality.

6. Towards the Efficient Image

When we distinguish between efficiency and concision of language, we can no longer define efficiency by straightforward measurements of words per line or lines per poem. Efficiency offers something very different than concision because it compares a (perhaps) quantifiable input with an ambiguous output. I have arrived at a definition of efficiency that

elucidates "output" by examining a poem's measureable internal referents, which are the loops that link repetition to repetition. Now, I should say that I have no interest in measuring the circumferences of repetitious loops by counting words, but, I will examine these loops with interest because they imitate the iterative processes by which an inventor improves his machine's efficiency.

This paradigm for analyzing efficient poetry causes us distress when we turn at last to those who claimed they advocated efficiency. Imagism offers only the illusion of a straightforward relationship with efficiency. In fact, I think it is necessary to approach the Imagists circumspectly, through their close associates, the Vorticists. The Vorticists published only two issues of *Blast Magazine* before the movement's collapse, but its influence has encouraged substantial critical attention. Although Vorticism is regarded as the successor of Imagism, especially by their mutual advocate Ezra Pound, their geneses occur almost simultaneously. Moreover, Vorticism's unique sense of efficiency offers a middle ground in the transition from Stein to Doolittle. The ideas manifest in each movement are proximate and at times nearly inextricable, but Vorticism also offers a closer kinship with Cubism. Stein's, Picasso's, and Pound's aesthetic theories intersect most clearly within Vorticism.

As I examine Vorticism, I would like to pay special attention to a few of the principles that Hilder associates with Stein, particularly oscillation and vibration. Although these words are at times used interchangeably, I want to draw a finer distinction. Oscillation indicates intentional repetitious movements, while vibrations constitute a disruptive force that counteracts efficient systems. In my study of Vorticism and its relationship to efficiency, I would like to contribute to existing critical attention—such as Cobley's—to efficiency's implications in early twentiethcentury society. However, I would like to investigate efficiency primarily from the inside out,

and I would like to pay special attention to these systems' "center," where the dream of perfect efficiency lives on, just out of reach. Rather than address the friction induced by adjacent efficient systems, such as the manifold implications of capitalism in industrialized societies, I will attend to internal friction. If the dream of perfect efficiency necessarily meets with failure, what is the mechanism of loss—loss of energy, loss of meaning? What causes it to arise? And when these disruptions arise, how does an efficient system respond to its own imperfections?

Chapter IV. Vorticism and the Dream of Perfect Efficiency

"A motor goes inside of an automobile and the car goes. In short this generation has conceived an intensity of movement so great that it has not to be seen against something else to be known, and therefore, this generation does not connect itself with anything."

--Gertrude Stein, "Portraits and Repetitions"

1. The Vortex

On the eve of the First World War, it was possible to observe with awe the amassed European arsenals and imagine the imminent downfall, not of one political power or another, but of the limits of human progress. The continent was marked by an ebullient spirit that trusted in technology as the means by which Europe would transcend its historical tribulations. Among the foundational principles of this spirit, efficiency was celebrated with enthusiasm matured from that born in the middle of the ninetcenth century. While many artists expressed their concern for the implications of technology in general and efficiency in particular, an equal number participated in the zeitgeist and aestheticized these principles through theorizing and artistic production. I have discussed Gertrude Stein's position, which seems to straddle this fence, but Vorticists offered an unequivocal endorsement of efficiency. Moreover, their endorsement does not aspire just to a competitive but also to a reflexive sense of efficiency. The Vorticists dream of perfect efficiency, and so, through their rise and fall, I trace the inevitable consequences of approaching that boundary.

When Ezra Pound and Wyndham Lewis printed the first issue of *Blast* magazine in 1914, they sought a concrete metaphor to embody the driving forces of their creative production: energy and order. They often regard order as efficiency, a minimization of waste (*Blast 1* 153). In deciding on the Vortex as the most fitting metaphor for their movement, they integrated a pair of principles that, in neither science nor art, could exist in a productive relationship. In fact, contemporary science suggests that energy precipitates chaos, while order is possible only in an inert medium. In the Vorticist fiction that Pound and Lewis unfold, the metaphor of the Vortex is like the eye of a hurricane, which, although it appears still, contains the most vigorous wind currents. As I will argue, the Vorticists did not account for the critical role that chaos would inevitably play in their purportedly "efficient," "uncompromising," and closed system of artistic generation (Blast 1 148). Specifically, at the outset of the First World War, this fantastically closed system of energy and order could not sustain the severe chaos brought on by the gross materiality of tanks, planes, and guns. After the dissolution of Vorticism, Pound and Lewis would notoriously become associated with Fascism (Lewis briefly, and Pound until his death). Through a close examination of their experiment in Vorticist thought, especially in light of their later efforts to aestheticize artistic and social oppression through Fascist propaganda, I identify the oversight that would bring Vorticism to an abrupt end. Although the very seeds of Fascism can be found in Vorticist thought, I argue that the Vorticists' refusal to attend to inevitable inefficiency, their refusal to apply what I call "damping" mechanisms to their efficient literary machinery causes the machine to shake itself to pieces. In a sense, Vorticism is an idealized version of Fascism, one that ultimately and positively guarantees its own failure.

In *The Birth of Physics* (1977), Michel Serres employs the symbol of the Vortex, but he observes its linear flows translated into chaos instead of order. His model—which suggests something like the turbulence at the base of a waterfall, rather than the apparent stillness of a hurricane's eye—seems to render the implications of war better than the Vorticists'. Although they insist that their Vortex is stable and "uncompromising," the vast discrepancies between

Blast's pre-war and war-time issues suggest that Vorticism's publicized goal must fail. Further, I hope to associate Vorticism's impossible ambitions with that of the perpetual motion tinkerer.

Vorticism collapsed due to its concurrent assertions of order and energy. To elucidate these concepts I investigate the Vorticists' crude applications of science, and, by rendering them in their full complexity, I suggest that contemporary notions of chaos, such as the theories that have descended from quantum physics, predict Vorticism's violent collapse. Further, in the Vorticists' ambition for energetic order, I observe a number of pernicious implications, notably the origin of Pound's and Lewis's descents into Fascism. Rather than revisit the thorough scholarship that concerns the ideology's later fruition, I will instead identify its germination in *Blast* magazine's creative works and manifestos. The suppression of mechanical vibration in an engine will serve as an analogy that will help elucidate the Vorticists' oversight.

2. Reciprocation to Rotation

Among the inventions of the modern age in which Pound and Lewis theorized, few received as much public attention as the automobile and aeroplane. Despite her commitment to avoid icons of popular culture, Gertrude Stein addresses automobiles in "Portraits and Repetition" because they offer a trenchant image of the *static energy* she seeks to describe (166). Making these vehicles possible, the reciprocating engine translates linear into circular motion and kinetic into rotational energy. This machine may be simplified in such elementary scientific relationships, but its practical application is in fact complex. Even the simplest of mechanical motions are inherently subject to vibrations, and the reciprocating engine's apparently elegant translation contains a multitude of chaotic fluctuations, which seem to arise from no external force, as in Serres's Vortex. I will employ the analogy of the reciprocating engine to clarify both Vortex models: the Vorticists' models reconcile dichotomies as singularities, while Serres's

dissolves singularities into chaos.

A reciprocating engine consists of three main components: the piston, the link, and the wheel. A pressurized piston forces the link in linear motion, which then turns a wheel (or crankshaft in the case of an automobile). The linear withdrawal of the piston completes the rotation of the wheel. Only in light of these elementary scientific principles, which are defined



Figure 3: Reciprocating Engine

by the continuity and fidelity of their translations, can Vorticism's disparate analogies of reciprocation and rotation hold together.

Yet contemporary scientific theories call into question such idealized translations. According to the tenets of quantum physics, specifically Heisenberg's Uncertainty Principle, the position and momentum of particles can only be mutually calculated within a degree of uncertainty. This means that the universe is not in fact governed by precise physical laws, that Galileo's proverbial ball, if dropped twice from the Leaning Tower of Pisa, might not follow the same trajectory, even if the circumstances of the experiment were perfectly replicated. Serres sees the first utterance of this profound theory not in the work of Max Planck, who theorized contemporaneously to the Vorticists, but in the ancient Roman philosophy of Lucretius. In revitalizing Lucretius's notion of the *clinamen*, Serres explains that, in the case of fluids, "a flow is or always becomes turbulent. The *clinamen* is the infinitesimal turbulence" (*The Birth of Physics* 83). Serres vindicates Lucretius by associating the philosopher's theories to contemporary quantum physics and in doing so calls into question all ordered systems. By extension, he suggests the Vorticists' model was destined to fail, war or no. The Vorticists' predictable translations of motion and energy disregard the inevitable decline of order into chaos. Like Pound's later Even as the Vorticists asserted their aesthetic theory of convergence,

physicists asserted their scientific theory of divergence. Although Serres never directly mentions the Vorticists, he seems to implicitly critique them when he claims that the Vortex "interrupts the universality of the laws. It opens the closed system. It places the physical laws under the rule of exception" (77). Whereas the Vorticists combined dichotomies into singularities, Serres's

Vortex moves from simplicity to complexity. Thus, the Vorticist notion is quite distinct from Serres's. The Vortex described in *Blast* seems to have more in common with the engine's rigid translation than with realistic fluid models. *Blast's* manifestos reinforce this curiously rigid, yet fluid, system.

The two issues of *Blast* are marked by their abundance of brash, hyperbolic manifestos that spare no

artistic, political, or cultural institution from their acerbic



Figure 4: The Vortex, Blast 1, pg. 4

critiques. In the second issue of *Blast*, Lewis positions his movement among rather than outside these institutions, claiming that "you must give the impression of two persuaders, standing each on a different hip—left hip, right hip—with four eyes vacillating concentrically at different angles upon the object chosen for subjugation. / There is nothing so impressive as the number TWO. / You must be a duet in everything" (91). The "TWO" challenges *Blast's* readers by setting up a second distinct visual representation to stand beside the singular Vortex. Only through translation, through machinery, do they hold together.

In their writings the Vorticists do not indicate whether they understood the principles of mechanical translation implicitly or explicitly, but science seems a natural medium for the comprehension of their ideas. Perhaps it served as a catalyst for their theorizing, too. *Blast's* editors state, "we fight first on one side, then on the other, but always for the SAME cause, which is neither side or both sides and ours" (30). This peculiar phrasing mimics the energy transfer of the reciprocal engine, linear to rotational, by equating the plural "both" with a singular "neither": the double-sided piston transforms into the single-axis wheel. Perhaps *Blast's* editors intend a paradox here, but to take their language seriously is to translate duality to singularity. What is particularly noteworthy is the simplicity of the language, which lends itself to abstraction and to rigidity; it suggests a mathematical exchange. They have fused the seemingly incompatible components of their artistic movement, the Vortex and "the two." "Beyond Action and Reaction we would establish ourselves" begins Manifesto I, and the claim elegantly describes machinery; the reciprocal engine constantly translates the piston's action and reaction through the Vortex into the wheel's rotation (30).

In addition to numerous bombastic manifestos, Pound contributes a number of poems to *Blast 2*, and "Dogmatic Statement on the Game and Play of Chess" clearly articulates the translation between reciprocation and rotation. He idealizes the linear arrangement of a chessboard and its pieces' movement in the first stanza of the poem:

Striking the board, falling in strong 'l's of color,

Reaching and striking in angles,

holding lines in one color.

This board is alive with light;

these pieces are living in form. (B 2 19, lines 2-6)

Although motion fills the poem, the chess pieces act like the brush strokes of the angular and faceted artwork of *Blast*. Leaping, striking, and clashing, the poem's actors are defined by motion—but a kind of instantaneous motion. Ming-Quian Ma identifies the reason for Pound's rejection of "slow" motion, explaining that time "prolongs the temporal-perceptual instantaneity into a slow, conceptual lingering in which the keenness or the acuteness of the object, otherwise experienced directly, is lost" (50). Idealized, keenness and acuteness prohibit any gradual displacement or transformation of the chess pieces. Thus the Vortex's center involves what Ma describes as time compressed until it becomes "the present, which is instantaneous" (49). The Vorticists' rejection of the past and future corresponds to this sense of instantaneity. Lewis proclaims, "we stand for the reality of the present—not for the sentimental future, or the sacrosanct past" (*B1* 147). The infinitely narrow rotation at the Vortex's center, which is also infinitely rapid, models the "instantaneous."

The poem's turn unsettles this rigid linearity when Pound writes, "Whirl, centripetal, mate, King down in the Vortex" (*B2* 19, line 12). How has the linear movement of a chess piece transformed into a "whirl"? I suggest that the Vortex has transformed one into the other at its center. The Vortex's center confuses all distinctions—is the king crowned or captured?—and transposes the seemingly irreconcilable. In this way, the center of the Vortex resembles a mathematical asymptote, where trends may concurrently approach positive and negative extremes. Perhaps extremity defines the Vortex's center. The analogy of the crankshaft and piston likewise suggests that the whirling king has passed through the Vortex's center. In the case of the engine, reciprocal and rotational cycles approach a singularity as speed increases and distance decreases. When idealized, the two-step process of the piston plunging and retracting becomes a singular blur, no longer defined by beginning and end points. Two become one.

Ostensibly, the distinct lack of repetition in "Dogmatic Statement" disqualifies the poem from the genealogy I have imagined thus far. Although the poem's concision corresponds to the connotation of "efficiency" that I have previously critiqued, its lack of repetition makes it difficult to examine for the reflexive patterns that I have established as indicative of technical efficiency. I posit that Pound's poem goes without repetition and yet depends upon internal reference by its saturation in geometry. The angles, lines, and spaces of the chess board function as an internal scale for the chess pieces' movements in much the same way the repetitions of Stein and Wordsworth bend their poetry back on itself.

Through manifesto and poetry, the Vortex gives uniquely defines paired and opposed political currents, and these currents swirl in an ever-narrowing, ever-quickening spiral. Soon Europe would be fissured by linear battle lines, but, while their abstract sense of order endured, the Vorticists could imagine this energetic opposition into apposition. When Pound and Lewis printed the first issue of *Blast*, the gears of war were not yet in motion, or perhaps their motion was so rapid and so precise that they produced an illusion of stasis. In either case, the Vorticists were as yet unstained by the ugliness of war: they could essentialize the technology and imagine it as one with its milieu.

3. Nature and Machine

As the Vorticists sought to subsume their opponents in the Vortex, they established stark dichotomies, ascribing attributes in sets. *Nature* they associated with Romanticism and Germany, and *machinery* they associated with Futurism and Italy. Like the engine, the Vortex is a point of convergence where these distinctions are blurred and ultimately erased. *Blast 1* bears traces of nature and machine, as well as their synthesis, the *living machine*.

In "Come My Cantilations" Pound begins to hint at the living machine. He writes, "Let me be free of pavements / Let me be free of the printers" (lines 4-5). "Pavements" and "printers" evoke the modern industrial era, hinting at mass production and mass culture in turn, but he precedes the verses by naming among his hatreds "Hot sun, clear water, and fresh wind" (line 3). The poet prays that discrete instances of technology and nature be withdrawn. Perhaps these two themes can be associated with Futurism and romanticism, respectively. Instead of accepting them independently, he concludes by conflating the themes, claiming as a mantra for the Vorticists "We speak of burnished lakes, / and of dry air, as clear as metal" (lines 11-12). Pound's diction suggests that industrial analogies best describe nature and that natural analogies best describe industry. By associating organic and industrial materials, he removes them from their practical contexts and reduces them to their common, abstract essence. In this, he attempts to establish the union of energy and order.

While *Blast 1* merges nature and machine through poetry, in *Blast 2* Lewis gives theoretical definition to the move. Closely linked with Vorticism, Stein's Cubism offers a reservoir of visual analogies against which to define these impractical ideals. Lewis criticizes the work of Cubism's principle visual artist, Picasso, by suggesting that his "structures are not ENERGETIC ones, in the sense that they are very static dwelling houses. A machine is in a greater or less degree, a living thing. Its lines and masses imply force and action, whereas those of a dwelling do not" ($B \ 2 \ 44$). Force and life: he has formed an unlikely pair. Taken alone, his condemnation of stasis might suggest that motion defines Pound's aesthetic. However, he has neither wholly endorsed motion nor dismissed stasis; he holds them in precarious balance. Lewis distinguishes between Picasso's work and the "living machine": Yet these machines neither propel nor make any known thing: they are machines without a purpose

If you conceive them as carried out on a grand scale, as some elaborate work of engineering the paradox becomes more striking

These machines would, in that case, before the perplexed and enraged questions of men, have only one answer and justification

They could suggest or convince that they were MACHINES OF LIFE, a sort of LIVING plastic geometry, then their existence would be justified. (140)

Without a purpose, the living machine is its own end. Lewis seems to privilege the unified dichotomy, which, in terms of the engine, would privilege rotation over reciprocation. Further, the living machines maintain their geometry, and so it is not the independent moving pieces that fascinate the Vorticists but the energy behind the motion, and the artist's purpose is to detect that energy. The Vorticists' ambition closely resembles the relationship between stasis and motion from Stein's "Portraits and Repetition." Notably, the Vorticists seek to resist external references to avoid distracting from their objects' internal energy.

Later in *Blast 2*, Lewis joins another pair of seemingly disparate concepts. He defines the living machine as an instance of "rhythmic vitality" (*B 1* 86). "Rhythmic vitality"—a characteristically abstract phrase—is helpful as yet another bridge between an idiomatic understanding of nature (as unsullied Eden) and the machine (as lifeless automation). Yet, rhythmic vitality is more than a simple juxtaposition of two abstract entities. Instead, nature and the machine are mutually constitutive. The artist who treats them independently produces flaccid work, whereas their synthesis creates a fuller meaning.

The steady, efficient, inward swirl of Pound and Lewis's Vortex marks another contrast with Serres's conception. The Vorticists suggest that distinctions resolve into singularity and stability, while Serres suggests that they collapse into complexity and chaos. Maria L. Assad^{vi} offers a poetic retelling of Serres's sense of collapse, describing it as "the indeterminate state between cohesion and separation of molecules, rendered still less determinate by the adverbial 'somewhat,' both finally suspended in 'perhaps,' an adverbial expression of randomness" (33). Assad suggests that at the center of any confluence of energetic currents—at the center of any Vortex—there exists a point of indeterminacy. If indeed there is a seed of chaos at the center of Pound and Lewis's model, it was undoubtedly nurtured by the volatile times in which they theorized and wrote.

Now we may add another characteristic to the genealogy of efficient poetry. Efficient poetry often involves motion without progress, but it also involves the synthesis of multiple forces. Vorticism's translations from duality to singularity are manifold, but both Stein and Wordsworth offer the same pattern. For example, Wordsworth's multiple totems from "The Thorn"—the tree, the pond, and the mound—collapse into the concise "Woe is me. / Woe is me." Similarly, Stein observes a plurality of meaning within a singular *box*; she unpacks rather than packs, but the box remains. For Wordsworth and the Vorticists the pattern is quite clear. Multiple communing figures do not proliferate meaning, as Serres suggests; instead, they unite.

The singularity at the Vortex's center may be closely associated with the mechanical notion of efficiency, which in turn evokes the analogy of the reciprocating engine. In Pound's theory of the Vortex, he adopts industrial language. He states that "the Vortex is the point of maximum energy, / It represents, in mechanics, the greatest efficiency. / We use the words

'greatest efficiency' in the precise sense—as they would be in a text book of MECHANICS."¹ When considering the reciprocating engine, the radial placement of the link on the wheel (how close it is to the axis) relates directly to the force required to propel a system. If the link is pinned to the wheel far from the wheel's axis, little force is required of the piston and little energy is contained in the system, but, if the link is pinned near the axis, great force is required. The Vorticists seem to idealize this point where energy is maximized. Further, they dismiss the substantial waste inherent to all real mechanical and literary systems, waste that thrust itself into the Vorticists' attention at the start of World War I.

4. Italian Futurism

As a mechanical manifestation of the fluid Vortex, the reciprocating engine has served to translate one abstraction into another, and so those machines may be themselves regarded in the abstract. Yet an engine, as a mechanical device, is inextricably linked to the concrete. Thus far I have described the scientific underpinnings of the Vorticists' act of translation, positing in particular that their choice of a fluid model actually resembles a mechanical model because it rigidly transforms its subject with something like mathematical precision and consistency.

In a similar sense, Pound's celebration of efficiency appears consonant with the spirit of his age only until we attempt to apply a more practical, technical definition of efficiency (output divided by input) to his poetry. The preposterous endeavor can only proceed to a banal tautology and only if we severely limit the system (writer, context, and audience) to Pound himself: Pound perceives exactly what Pound writes without waste or excess. Any larger system subjects itself to the turbulence of subjective experience and shatters any useful measures of efficiency. What I would like to do now is examine the Vortex for turbulence by way of its literary opponents, the Futurists.

¹ Ibid.

Blast 1 associates modern technology with the Futurists. The movement, based in Italy and associated with Mussolini's rise to power, admired the physicality of machinery, motion, and change. Today, the implications of Futurism are perhaps more far-reaching than those of Vorticism, but the Vorticists portraved Futurism's adherents as sentimentalists and reactionaries. In *The Poetics of Impersonality*, Maud Ellmann explains that in naming them "sentimentalists" the Vorticists charge the Futurists with a kind of meddlesome self-assertion. For the Vorticists, planes, trains, guns, bombs, and wire fail as abstractions not because of their physicality but because of their usefulness. These objects belong to the Futurists because they demand human interaction. They are activated through participation, and so they cannot qualify as "living machines." According to the Vorticists, these objects are stripped of their aesthetic value because they are anthropocentric tools, existing for purposes outside themselves. In this, the Vorticists recall the necessary condition of uselessness in a perpetual motion machine. Closed systems *must* serve no external purpose. Ellmann explains that in contrast to the Futurists, Pound understood that "personal identity [...] surrenders to this interplay of moving energies, rather than transcending its commotion" (166). For Pound, individuals must cede their identities to the Vortex's singular energy. Thus, the Vortex dissolves the particular in the general. Mark Conrov^{vii} succinctly describes this Vorticist criticism of the Futurists: "to use a machine is to consent to enslavement by it, but passively to contemplate its laws is to be its superior" (22). Pound's assertions are all likewise aligned with the abstract---and against the concrete, against the Futurists.

Although Pound and Lewis despised the intimacy between Futurist and machine, their Vortex has been shown to function as a machine; the Vorticists fueled it with cultural and artistic dichotomies, and it produced predictable syntheses. According to Robert Cassillo^{viii} they call for

the individual to be subsumed in its currents, but *Blast*'s editors gained much notoriety when critics dismissed their theories (130). Nevertheless, the first issue of *Blast* succeeded in remaining distinct from Futurism. The true compromise came when the tangle of European powers confounded the second issue.

5. German Romanticism

I have investigated the idealized machine in both issues of *Blast*, but the self-ascribed quality—"our Vortex is uncompromising"—is unsettled by inconsistent incorporation of practical war-time technology (*B1* 148). In consideration of Lewis's assertion of fidelity, I would like to examine the attitudes of the Vorticists for signs of contradiction, for signs of transition from antagonism to engagement with war technology.

The war hampered enthusiasm for art, and the Vorticists adopted a pragmatic stance. In *Blast 2* Lewis compromises his mantra of non-representation, reasoning that artists should draw upon what inspiration allows them to keep fed. They opened their closed systems. This pragmatism feels cynical when compared with the keen distinctions of the first issue. The Vorticists also turned their attention from their aesthetic adversary, Italy, to England's political adversary, Germany, which seems to function as an outlet for the Vorticists' growing attraction to technology. Lewis describes "the huge German siege guns, [as] a stimulus to visions of power," setting aside, it would seem, his previous denunciations of Futurism (*B 2 23*). According to Paul Peppis^{ix} the impetus for this shift in Vorticism is its submission to English nationalism. Although they withstood a battery of English anti-modernist rhetoric, they embraced those elements of nationalism which served their aesthetic. However, the national cause was compelling to the Vorticists for reasons that diverged severely from their country's

populace. Were it not for the war, the influx of nationalistic energy would have been stymied, and as that current died so would the Vortex die.

Lewis perceived, in the center of the turmoil of war, the same singularity that exists in the reciprocating engine, but mixed with it were inclinations that would later lead both him and Pound towards the same Fascist ideologies that marked their Italian adversaries. According to Peppis, "the conflict's devastation proved not the senselessness or immorality of war as such, but the human race's "fundamental" urge to murder and destroy.... He discovered in it dark and exhibiting truths about human aggression that confirmed the Vorticists' prewar celebration of vitalizing violence" (147). Here, Peppis contrasts the British aristocratic sense of the war effort, one of good against evil, with the Vorticists'. Pound and Lewis saw the British motives for war as like in kind to the motives of the German Kaiser: romantic, and regressive. In the first issue of Blast, they did not perceive the two combatants as locked in a strained but static contest. Instead, they saw the energies of the nations as misdirected, each feeding the central Vortex. They saw the nations as equal currents, though not directly opposed, instead like traffic flows entering a roundabout. Their own interest lay at the center, where the energy of the Vortex is highest. Yet, as Peppis mentions, the editors tainted the second issue of Blast with aestheticized violence, which made it an incongruous companion to the kinetic stasis that had defined the first issue of *Blast*. The Vorticists found that violence demands a target, and they sallied forth from their self-imposed isolation.

The tumultuous reality of war attenuated the stable pre-war model of the Vortex. The trench lines on the continent represented intersecting vertices more nearly than swirling Vortexes. The French wheat fields had been torn into unseemly pocks and fissures. The oncegleaming tanks were fouled with mud and refuse. In short, the linear flows of European power
had not resolved in singularity and stability as the Vorticists claimed; they had collapsed into complexity and chaos.

6. War

Blast's editors espoused abstraction in their manifestos and poetry, but even their small coterie could not maintain such rigid standards for their artwork. As in any assemblage of artists, the idiosyncrasies of its members inevitably diminished *Blast's* "uncompromising" standards. Visual abstractions are diluted or even thwarted by artifacts of popular culture, including weapons that suggest Futurism. Pound's clean portrayal of battle is muddied by other works featured in *Blast* 2, notably "A Vision of Mud," by Helen Saunders, which explores the stuff of the trenches (73) Elsewhere the Vorticists' precise aesthetic is diluted with artifacts of popular culture, particularly those in "Preludes," which include "coffee-stands," "cab-horse," and many "gutters" and "shutters" (48-9). While the concrete imagery is not profuse, it betrays a certain inconsistency between theory and practice. This compromise might be understood in terms of Lucretius's *clinamen*, which "produces writing outside of the redundancy of repetition [and] is a deviation from equilibrium, a deviation from the universal." (*The Birth of Physics* 149). It seems that in proclaiming the "more against the less abstract," the Vorticists did little more than underscore their own inconsistencies.

When considering their turn toward practical technology, the personal involvement of Vorticists in the war cannot be forgotten. Their scientific analogies imply an objective approach to abstract content that simply cannot be squared with their personal involvement with the war's messy materials. The clearest enunciation of war technology came through Henri Gaudier-Brzeska's letter published in *Blast 2*. Perhaps the principle visual artist of the Vorticist movement, Gaudier-Brzeska, offers intimate descriptions of the trenches that may have forced

the magazine's compromise: "THE BURSTING SHELLS, the volleys, wire entanglements, projectors, motors, the chaos of battle DO NOT ALTER IN THE LEAST, the outlines of the hill we are besieging" (*B2* 33). He insists on the endurance of the Vortex throughout his letter, but his language is overrun with the concrete. Demonstrating a complete decay of the Vorticists' past opposition to Futurism, he describes a weapon of war that has inspired him, stating, "Two days ago I pinched from an enemy a mauser rifle. Its heavy unwieldy shape swamped me with a powerful IMAGE of brutality" (34). The technology had proved a greater appeal for the artist than the Vorticists' pledges of aesthetic fidelity. According to Keith Tuma^x they went so far as to embrace Brzeska's rifle as a symbol, directly contradicting their previous pledges of non-representation (413).

The inconsistency of the Vorticists' art indicates a certain loss of balance. The cultural artifacts of *Blast 2* seem to indicate an inclination in Vorticism's "duet," an inclination towards Futurism. Though the instability is slight in the pre-war issue of *Blast*, the tipping continued. David Barnes^{xi} explains that after the dissolution of the magazine, both of Vorticism's chief advocates would flee the center, and when Pound failed to revive *Blast* after the war, he embraced the seeds of violence he had found in the war machine. They would grow into ardent Fascism and lead him to exile in Mussolini's Fascist Italy.

7. Compromise

Although one of the "blessed" concepts in *Blast 1* is "the more against the less abstract," I have demonstrated this principle's erosion as its heavy implications were borne out from peace and into war (*B1 22*). The Vorticists' penchant for hyperbolic manifestos might suggest that their shifting feelings towards technology were simply ambivalent, that the movement was never theoretically or artistically solidified, as has been suggested by some critics such as Barnes and

Cassilo. I want to argue, however, that this flattening of Vorticism into Futurism overlooks the literary and the scientific primacy of the Vortex. The Vortex emphasized a singular aesthetic ideal from conception to dissolution. It is the uneven incorporation of science and technology that disjointed the magazine's first and second issues and resulted in serious compromises of the "uncompromising" Vortex. Perhaps we can excuse Lewis's brash claim that "all art that matters is already so far ahead that it is beyond the sphere of these disturbances": the Vorticists were undoubtedly disturbed by their volatile times (*B2* 13). The "present" they endorsed could have bridged few historical fissures so wide. Yet the efforts of the Vorticists cannot be said to have lain primarily in theoretical fidelity. Indeed, their highest aspiration is certainly that of the number "TWO." To stand *between* was their first and primary self-ordained duty.

Critics have drawn together the contradictory foci of *Blast's* first and second issues by returning to the duality that Lewis evokes in the opening manifestos. Peppis draws the poles together when he explains that,

by using their talents to resist Britain's official antimodernist wartime culture, even as they supported the Allied cause, the Vorticists and their allies managed to produce a body of literary and artistic works that were at once propagandistic and experimental, imperialistic and avant-garde, Edwardian and modernist, and thus further evidence of Vorticism's fulfillment. (47)

Here, the sense that Vorticists found their place by opposing every major cultural institution is balanced with the sense that they yielded to each as well. It is unclear whether the many remote entities to which the Vorticists appealed could be embraced together, even partially, without profound contradictions arising. Whether defined by paradox or antinomy, the proponents of Vorticism strove to remain unaffiliated in an age of extremes. Using science as analogy and as

subject matter gave the Vorticists tremendous power in a decade enamored with its shining, whirring, and thundering, but it also proved to be a vulnerability. The dramatic transition from technology as an icon of the present to technology as an instrument of the war, proved too great a strain for the Vorticists' pledge of no compromise. They claimed that they could stand still while remaining between two volatile entities, Futurist Italy and romantic Germany. A world at war proved this paradoxically stable and belligerent stance impossible, and its chaotic implications scattered the Vorticists. As a facet of my larger conversation, the Vorticists aspired to a perfectly efficient aesthetic system, and they met with much the same results as the perpetual motion tinkerers.

Critics have cannibalized *Blast* magazine for evidence of Pound's later, definitive Fascism. David Barnes dismisses Vorticism as "heavily indebted to the Futurists [...] at times awkward in its protestations of distinctiveness" (26). Yet distinction was copious in *Blast*. I have identified the Vorticists' excess of theoretical distinction, alongside their lack of artistic production. Perhaps Barnes has misidentified what is in fact the Vorticists' lack of fidelity to a severely delineated aesthetic stance. Robert Casillo likewise reduces Vorticism to a kind of inchoate predecessor to its advocates' later Fascism. He states that Pound is "professedly antidualistic" (300), referring of course to the explicit anti-Semitism of the Cantos, but Casillo's claim disregards *Blast*'s concept of "the two." Pound's dualistic assertions trouble biographers that intend to emphasize the late Pound, and so his professions of balance are forgotten. However, the criticism does aptly call into question the rapidity of *Blast*'s editors' desertion of Vorticism for Fascism. The fascination with technology that I have described certainly played a role, but this seems an inadequate explanation for the nearly instantaneous transition from the balanced "two" to Fascism.

The editors of *Blast* can hardly be said to have been dispersed by its collapse. In fact, they were shortly after associated with one of the two powers they had previously condemned. The later radicalism of Vorticism's chief advocates has been thoroughly studied, but these accounts consistently disregard Vorticism's vexed professions of balance. This surprising result leads me to wonder at the scope of the aftermath of the Vorticists' ambition. It seems that the dream of perfect efficiency leads to something more dramatic than a workshop full of inchoate inventions. Before I engage the terse poetry of the Imagists, I would like to inspect the exact failure mechanism in the bold and ill-fated Vorticist system.

8. Damping

Though the Vorticists attempted to reconcile dichotomous sets of artistic beliefs, it should be noted that they also constructed those dichotomies, roughly hacking their forms from a mess of socioeconomic, geopolitical vacillations. They not only attributed artificial clarity to their Vortex, but also oversimplified and caricatured their opponents. To describe the result of the Vorticists' imposition of order, I would like to revisit the analogy of the reciprocating engine, which has thus far been described in terms of linear mechanics, and render it in its full complexity.

The reciprocating engine was first associated with steam power and is therefore an object as closely associated with thermodynamics as with mechanics. The pressurization and exhaust of the pistons is a fluctuation of temperature as much as pressure. Moreover, these changes in temperature subject the mechanical components of the machine to erratic distortions, expansions and contractions. To speak of steady translation from linear to circular, as if by a sinusoidal function, is to ignore an entire world of minor fluctuations. In his study of the painter J. M. W.

Turner, Serres widens the scope of turbulence to time itself, perhaps suggesting in the case of Vorticism that its collapse was not particular to its era but the fate of all attempts at lasting order:

Far from flowing in laminar and continuous lines, like a well-behaved river under a bridge, upstream to downstream, time descends, turns back on itself, stops, starts, bifurcates ten times, divides, and blends, caught up in whirlpools and counter-currents, hesitant, aleatory, uncertain and fluctuating, multiplied into a thousand beds like the Yukon River. ("Science and the Humanities" 15)

The particular property that causes vibration to arise in all matter is known as *natural frequency*, the same property that causes a flag to ripple in a steady breeze. The illusion of stability depends upon the suppression of these minor fluctuations, a process known as *damping* in mechanics. The Vorticists fail to employ theoretical damping to their manifestos: their stark language leaves no leeway for minor contingencies (like artistic freedom) or for major (like world wars). But how did such a rigidly balanced system so quickly precipitate its opposite?

The most succinct explanation for the transformation may be found in our robust analogy of the engine. When an engine's parts are subjected to certain forces, natural frequencies cause vibrations to escalate indefinitely unless they are damped. The more rigid the component and the more consistent the force, the stronger the vibration becomes: energy provokes disorder. As with the Vortex, the energy exerted in a reciprocating engine makes it susceptible to catastrophic failure. The history of technology is pocked with instances of improperly damped structures and machines that succumbed to vibration. For example, in 1940, when Ezra Pound was living in Mussolini's Fascist Italy, the third longest bridge in the world collapsed in Tacoma, Washington, when wind currents activated the sub-structure's natural frequencies, causing ten foot oscillations along its roadway. The interactions of the various engine components' vibrations create a

dynamic scenario that approximates Serres's Vortex. Katherine Hayles^{xii} describes chaotic vibrations as "too complex to be adequately modeled through any simple form" (8). Thus the simple translation of reciprocation to rotation can only be achieved if the engine's natural frequency, a kind of predisposition to disorder, is suppressed through damping. An engine without proper damping is capable of shaking itself to pieces within seconds. Minor arrhythmias in the system can rapidly escalate into vibrations, which in turn can strain the mechanical properties of the engine's components, potentially to a point of failure. When rendered in the fullness of its complexity, it seems the reciprocating engine actually resembles Serres's Vortex, a microcosm of a chaotic universe.

Blast's brief life is marked by inconsistency, but these aesthetic vibrations arise from its editors' ambitions for stability. In *The Birth of Physics* Serres articulates the futility of the ambition to assert perfect order: "The *clinamen* is always there: if we fill it one place, it reappears elsewhere" (178). According to the abstract science that Vorticism espouses, Vorticists blast their own engine by insisting upon its superlative stability. By attempting to suppress the chaos of Lucretius's Vortex, the Vorticists produce it instead.

The Vorticists offer a new dimension to the genealogy of poetic efficiency. Their poetry shuns the repetitions that Wordsworth and Stein vigorously apply, but the Vorticists seek a similarly closed system. The Vortex offers a lucid image of restriction and reflexivity, and its position on the borders of fluid mechanics, thermodynamics, politics, and poetics suggests an unlimited number of applications. It is also clear that the Vorticists help define a trend in which external motion recedes in favor of internal energy: Wordsworth's poems are often concerned with circumambulations through natural landscapes; Stein's poems restrict the frame of reference to singular objects, but here she maintains a dynamic perspective within that frame; Pound's

poems attempt to ignore the turbulence of his time (with some success); the Imagists occupy the extreme in this trend, where all energy is internal. As I have demonstrated through Serres, this trend matches the chronology of the transition from the dominance of ordered Newtonian physics to the dominance of chaotic thermodynamics.

Another trend that finds completion in the Imagists is that which begins with Wordsworth's inward spiral. Each successive poet addressed in this study concentrates on a narrower cross-section of this pattern. The Imagists' poetry that I examine employs patterns of restriction and reflexivity, but the narrowness of their attention would seem to preclude a narrative of progress like Wordsworth's. In my final chapter, I intend to expose this as a misconception by examining the poetry of H.D., the proclaimed exemplar of Imagism. I do not intend simply to expose the inconsistencies between her poetry and the idea of perfect efficiency. I will articulate fully the connection I intimated in this chapter between Ezra Pound's enthusiasm for perfect efficiency and his execution of authoritarian control.

Chapter V. H.D. and Imagism

"The scientist does not expect to be acclaimed as a great scientist until he has discovered something. He begins by learning what has been discovered already. He goes from that point onward" —Ezra Pound, "A Few Don'ts" (1913)

1. Concision and Efficiency

Ezra Pound's leadership of the Imagists predated his leadership of the Vorticists, but these movements are so closely related that to speak of one or the other as a historical precedent ignores their interdependence. Pound's direct influence over the Imagists ended in the summer of 1914 after his dictatorial leadership style came into conflict with Amy Lowell's greater tolerance for idiosyncrasy. The first issue of the Vorticists' *Blast* was published soon after this change of leadership, so it is clear that Pound had contributed to each movement concurrently.

In this chapter I would like to address the enduring influence of Imagism, recalling Vorticism's abrupt failure, and examine the Imagists' poetry for signs of a more sustainable model of efficiency. At the same time, I intend to complicate the offhand descriptor "efficient" that has so often been applied to Imagist poetry and instead apply the model of restriction and reflex that has been developed in the previous chapters.

The conflation of "concision" and "efficiency" has led many critics to affirm carelessly Ezra Pound's assertion that Imagists accomplish "something like 'maximum efficiency of expression'; I mean that the writer has expressed something interesting in such a way that one cannot re-say it more effectively" ("The Serious Artist" 214). Nothing of the definition offered here, nor of the technical sense of efficiency, demands concision, yet many have read it thus. When I discussed the nineteenth-century perpetual motion machine, I called attention to the possibility that two machines of coordinate efficiency values might transfer energy through

direct and indirect methods, through limited and copious transformations of energy. Many parts do not denote inefficiency, and neither do many words. If efficient poetry aims for maximized expression with respect to the number of words employed, a well-crafted long poem may offer greater "efficiency of expression" than an amateurish short poem. The trouble with the analogy of technical efficiency is that poems do not easily submit to measurement. In the previous chapter we came to regard repetition as the only reliable tool for measuring a poet's regard for the relative efficiency of a poetic message. Repetition acts as an internal scale and can direct emphasis from less to more efficient circuits. While often lauded as the prime example of efficient poetry, Imagism's advocacy of concision and scorn for redundancy raises a number of compelling questions about the efficacy of the word "efficiency" with regard to Imagism.

I will investigate both the convergences *and* divergences of concise and efficient poetries. While many of the Imagists' theoretical ambitions correspond well to the principles of a technical sense of efficiency, the more fascinating relationships come from instances in which concision does not induce efficiency—the reverse of Wordsworth's lathe. To investigate Imagism for evidence of efficiency, I will examine H.D.'s poetry that spans the years of the publications of *Des Imagistes: An Anthology* and *Some Imagist Poets: An Anthology*. These collections fall under the influence, respectively, of Pound and Lowell, and offer a complete spectrum of the effects of dictatorial to democratic leadership. To further supplement these readings I will draw from H.D.'s independently published volumes *Sea Garden* (1916) and *The God* (1917). In reading Imagism's principal poems from its principal poet, I hope to uncover evidence that situates Imagism's professed "efficiency" in relation to Wordsworth and Stein.

2. Imagism and Efficiency

As I observed in my chapter on Vorticism, Pound's propensity for severe and at times hyperbolic creeds gets him into trouble with the idiosyncrasies of publications, poets, and poetry. Pound's authoritarian approach to Vorticism provoked chaos instead of order, and I hope to discover signs of thwarted perfection in Imagism, too. Suzanne Raitt^{xiii} wonders if it was not "as impossible to write a truly Imagist poem as it was to lead an absolutely efficient life" (843). If Pound's ambition is to create poetry of peerless efficiency, perhaps it is frivolous to critique the Imagists' failure to achieve the impossible. Yet Vorticism's similar ambition and its catastrophic failure (rather than the expected anticlimax of imperfect efficiency) implies broader and more troubling ramifications in Imagism.

Imagism has come to be known as an unparalleled movement privileging concision, and on this point the critical response has been so univocal that the dramatic incongruities of concision and efficiency have gone unquestioned. Raitt observes that "from the beginning, Imagism was associated with getting rid of extraneous material," an apt summation that seems to suit both concision and efficiency (841). Presumably, she draws this conclusion from one of any number of the aesthetic assertions that originated in T. E. Hulme's 1908 lecture to the Poets' Club, *A Lecture on Modern Poetry*, and which Pound developed thereafter. Yet, many of Pound's conclusions imbue the conversation with a false sense of clarity. For example, Pound^{xiv} demands that (good) poets "use no superflous word, no adjective, which does not reveal something" (201). Here, we begin to see why the language of efficiency has been attended to so clumsily. Pound's concise dogmas—which he insists are only guidelines—hinge upon weighty assumptions that he rarely deigns to explain in full. One might ask of Pound's "don't," what word and in which context could ever fail to reveal *something*? Before I spend more time

addressing the ambiguities of the theories of Imagism, I would like to address some evidence of "efficiency" in its practice.

An early critic of the Imagists, Glenn Hughes notes in *Imagism & the Imagists* the contemporary critical consensus that only H.D. was a "true" and "perfect" Imagist. I intend to take this title seriously and examine her poetry as representative of Pound's aesthetic theory. In "The Contest," H.D.'s language of sculpture clearly demonstrates the Imagist belief in removing waste:

your stature is modelled

with straight tool-edge:

you are chiselled like rocks

that are eaten into by the sea. (lines 1-4)

Here, the theme of sculpture is consonant with the cultural fascination with efficiency. Raitt reminds us of the manifold applications of efficiency in the early twentieth century—social, physical, industrial, domestic, mental, and personal—and she returns to their common interest: "efficiency was designed first and foremost to eliminate waste" (836). The question of what is pure and what is dross migrates from the Imagist theories into their poetry. In "Sea Lily," H.D. again attends to a natural object, from which an outer façade falls away to reveal a harder and more vivid core:

Myrtle bark is flecked from you scales are dashed from your stem sand cuts your petal

furrows it was hard edge,

like flint

on a bright stone. (lines 17)

Piece by piece, the sea-wash strips the fascia from the stem. Yet let us not become distracted by the proximity of themes of efficiency and efficient poetic structures. Indeed, these examples are not necessarily representative of H.D.'s themes between 1914 and 1917; her themes are diverse, and I do not intend to prove that the removal of waste reigns *thematically* in Imagist poetry. These poems' thematic correspondence to efficient patterns offers us a starting point, but I hope to arrive at efficient *structural* patterns—or their lack. In fact, these selections offer little in the way of the recursive patterns manifest in Stein's or Wordsworth's poetry. However, H.D.'s early work offers a surprising number of repetitious structures.

I would like to begin by discussing the theoretical foundation of Imagism in greater detail, to clarify the relationship between Pound's notion of poetic efficiency and the recursive, restrictive definition I have developed. Then it will be possible to determine what manifestations of efficiency H.D's poetry can offer.

3. The Image as Objectified Emotion

Pound's interest in science is clear from *Blast* magazine, but we have not yet rendered its precise role in his aesthetic. Pound's attitude is at times that of a dilettante—he often incorporates language that suits his purposes without thorough vetting—but evidence suggests his broader theories of the relationship between art and science were clearly delineated, if in a piecemeal fashion, throughout his writings.

In the details it becomes quite difficult to discern Pound's intentions for Imagism because he rarely escapes the vagaries of rhetoric (even while he denounces rhetoric as an end of poetry).

One gets the impression that Pound's statements on Imagism drift, offering only the illusion of finality. Throughout his career, his theories prove themselves perpetual works in progress. In his essay, "Credo" (1917), for example, Pound unveils a magnificent string of descriptors that resolve only as a handful of abstractions. For Pound, twentieth-century poetry will be

harder and saner, it will be what Mr Hewlett calls "nearer the bone". It will be as much like granite as it can be, its force will lie in its truth, its interpretive power (of course, poetic force does always rest there); I mean it will not try to seem forcible by rhetorical din, and luxurious riot. We will have fewer painted adjectives impending the shock and stroke of it. At least for myself, I want it so, austere, direct, free from emotional slither. (*Literary Essays* 12)

Poetry will be hard, truthful, and direct, says Pound. Yet this definition offers no *hard* distinctions. His readers have been forced to assemble definitive evidence of Pound's stance from a number of proximate statements. "Consider the way of the scientists rather than the way of an advertising agent for a new soap," advises Pound, and we draw from this and a limited knowledge of the scientific method that in Imagism the object of consideration will receive attention without thought for the audience ("A Few Don'ts" 203). It seems clear that Pound intends poetry that is consonant with scientific practice. Yet elsewhere he suggests that Imagists do not attend to physical objects. Instead, imagery is the corollary of an emotional *Image*. John Gage^{xv} attempts to explain Pound's contentious association of emotion and science: "what the poet records is emotion, but this is not inconsistent with the ends of science, for through the emotions we gain part of our knowledge of man's nature" (157).

Now, we may associate another pattern with the poets in this study. In each instance, the poet attempts to integrate emotion with the scientific method. Rather than offering emotion as a

superior realm of knowledge, these poets place it on equal footing with the scientists' quantifiable datum. When the poet stirs emotion into the existing empirical methodologies, for example, through Stein's "radical empiricism," the poet accepts the influence of science in return. Gage explains that Pound believed emotion to be "something' that exists somehow independently of anyone's intention to express it, much as a law of physics is assumed to exist" (153-4). For Pound, poetry is not as much a creative act as an act of discovery. This assumption has clear implications for the creation of efficient poetry. The language of cutting away, of sculpture and of exposure, extends from Pound's modification of the scientific manner.

The belief that emotion was subject to the methods of scientific inquiry leads Pound to regard it in objective rather than subjective terms. This surprising and ostensibly fraught assumption leads to a number of important conclusions. In *Imagism: A Chapter for the History of Modern Poetry*, Stanley Coffman assembles Pound's disparate statements to conclude that Imagism's chief theorizer intended his art to be "an *equation* for the emotion and not the emotion itself. [Pound] felt that this effort to objectify emotions was the element needed in modern art" (205). While the scientist had access to and authority over the material properties of the world, the poet had the same relationship with emotional truths. I suggest that this belief is a necessary condition in the ambition for perfect poetic efficiency. Without the ability to inscribe and thereby capture an emotion, poets are reduced to dealing in the relative. They must appeal to the malleable interpretations of their readers. If a poem must communicate with its reader's associations and circumstances, then it opens upon an unbounded network of signification. Without the ability to inscribe an emotion through objectivity, poets are forced to open their closed system. Although the possibility of objectivity in poetry has generally been treated with

derision in the modern era, its influence quietly endures, in part because it refers to the dream of perfect efficiency.

It is no wonder that Pound secreted this audacious claim—that emotion may be regarded in an objective sense and that the poet has access to emotion's objective truth—within a collection of oblique theories. To the contemporary critic, this position is simply indefensible. However, Pound's audacity should be attributed as much to his conceit as to the intrepid scientific spirit of his age. The optimism that science inspired, even after the First World War, was enough to buoy the Imagists' poetry toward this radical objective. Thus, the conversation turns once more to the Sisyphean narrative of the efficient poet. A century after Wordsworth's failure to achieve perfect efficiency and four centuries after Leonardo da Vinci's censure of the perpetual motion machine, the Imagists return to the ambition of perfect transmission.

From the dual beliefs in objectified emotion and the poet-scientist, a number of necessary conditions descend. According to Raitt, "every word was needed, and every word helped to create a literature that fully and exactly expressed human experience without any surplus. But defining that 'perfect fit' was as awkward as defining literary efficiency in the first place" (849). Raitt carefully articulates one of the necessary conditions of Pound's Imagism, and she immediately moves to critique that condition. Like the perpetual motion machine, each piece of the Imagist poem was intended for some critical and non-redundant purpose. At the heart of her definition, Raitt implies a critical weakness in Pound's theory. Either Pound intends for an Imagist poet to capture one individual's particular emotional experience, in which case the language of objectivity becomes null, or he intends to suggest that a fixed set of words may reliably evoke the same emotional experience in multiple readers.

If this first condition is concerned with the poet's process, another necessary condition concerns the nature of the poetry produced. Comparing Pound and Wordsworth, David Simpson^{xvi} concludes of the former that "the poem is a record of a moment transcribed for its own sake within an assumption of sufficiency" (680). In the tradition of Adorno and Horkheimer, Simpson recognizes that scientific data cannot direct themselves. Whatever "objective" data the Imagist poet gathers may serve no external purpose. The objectified emotion's lack of a purpose, or perhaps its self-serving purpose, ties Pound's Imagism to the larger conversation of the closed poetic system. Moreover, his disregard for audience evokes efficiency's reflexivity. Gage takes issue with the condition of sufficiency: "However objectively presented, an 'image' represents a selection of details. The particular selection must be assumed to have been made for some reason, a reason which is not a function of the subject itself" (158). Gage draws attention to the discord of the poetic process and the poetic product of (Pound's notion of) the Imagist. According to Adorno and Horkheimer, the scientist looks to a director, the spirit of enlightenment, to determine what information is pertinent and of value, and in a similar fashion H.D. looks for direction in Pound as she presents her observations: records of their extensive correspondence indicate that she read much of the Greek poetry that would influence her style at his recommendation. It seems that a self-sufficient, poetic system must extend to include both poem and poet, creation and creator.

To begin my critique of the Imagists' aspiration to perfect efficiency, I would like to examine a seemingly innocuous characteristic of H.D.'s style. Pound's imitation of science induces keen observation in H.D. and her compatriots.

4. H.D. Imagiste

H.D.'s observations bore many characteristics that one might associate with the scientific method. Coffman's intimate observations of the Imagists, recorded only fifteen to twenty years after Imagism's acme, offer less of the incisive critical attention than what the movement has since received, but more of a frank assessment of its participants' temperaments and relationships. Of H.D., he observes that "she took her art very seriously and tried to maintain very definite standards, particularly in regard to economical use of language" and "she pruned away all that might be criticized as superfluous" (146). Clearly, her early poetry is not simply a conduit for Pound's experimentation. H.D.'s poetry was as much the foundation for Pound's later theories as his theories were for her poetry. Thus, Pound's theories may be read as both a directing force for the Imagists and a critical interpretation of what H.D. had already accomplished. In the latter function, Pound is no less susceptible to misinterpretation than any other critic. I posit that Pound's interpretation of Imagist poetry demonstrates that he is ignorant of some clear indications of inefficiency in H.D.'s poetry.

H.D. rarely acted as a theorizer to the Imagists, instead turning her adroit sense of observation on the emotional objects that the Imagists sought to capture. While observation does not indicate efficiency as I have defined it, careful observation often implies incision, and incisive processes, especially when recursive, can situate a poetic observer in the genealogy of poetic efficiency. Through H.D.'s keen lens of observation, the facade of her "emotional objects" seem to fall away in favor of a harder interior. In "The Cliff Temple," a rock formation accumulates definition as she adds details of increasing precision:

Great, bright portal,

shelf of rock,

rocks fitted in long ledges,

rocks fitted to dark, to silver granite,

to lighter rock-

clean cut, white against white. (lines 1-6)

When we take up the mantle of the scientist, this observation seems careful, measured, and detailed, after the apostrophe of the first line. The content, if not the form, might belong in a naturalist's field notes. Yet the poem's repetition offers a surprising counterpoint to its general concision. While spare of verbs and economic of line, the poem returns often to "rocks" and "rock" in the short passage. The redundancies of these words are not trivial. When Pound insists upon "maximum efficiency" the recurrence of any word demands explanation. What function does this repetition serve, or, more to the point, what function does H.D.'s repetition's serve that the poetry of Wordsworth—that which Pound named "unutterably dull"—does not (*Literary Essays 7*)? I have contended that Wordsworth's repetitions signal the trajectory of meaning, its progress from inefficient to efficient expression. Here, I would like to examine H.D.'s poetry for signs of a similar process.

Before I proceed, I will address the question of whether this poem is representative of H.D.'s early poetry or an example of experimentation. My research has revealed that a surprising number of her early poems revolve about either a subject or object whose incomplete meaning is signaled by repetition. To first consider the poetry that has been definitively linked to Pound's doctrines, I must turn to a poem that bridges Vorticism and Imagism. "Oread" was featured in *Some Imagist Poets: An Anthology* as well as in *Blast 1*:

WHIRL up, sea ---

Whirl your pointed pines,

Splash your great pines

On our rocks,

Hurl your green over us,

Cover us with your pools of fir.

Here H.D. demonstrates the Imagists' characteristic natural images and economical language, both of which Pound carries to Vorticism. The sea offers clear examples of the motion which Vorticism features, but the juxtaposition of the pines' stark rigidity makes the poem a unique instance of translation. The poem leads the mind to discover in each natural object the properties of the other. As it is rendered, the poem demands that we synthesize the emotional associations of "pine" and "sea." The concision of the language seems to evade all reference, except those contained in the two principle figures.

Nevertheless, we have three pairs of recurring words in this short piece. "Whirl," "pines," and "us" each cause the mind to depart and return, which, as with all repetition, suggests that the first utterance is insufficient for its task. The imperative "whirl," for example, seems to command energetic motion in a broad and non-specific manner. But repetition returns to the same command, and with qualification. The second instance of "whirl" applies only to the particular metaphorically invoked property of the sea. Here is a brief but complete efficient cycle, played out in one of the most anthologized examples of concision. But, surprisingly, this efficient cycle depends upon repetition. Between Wordsworth's broad but restrictive circumlocutions and this unusual counterpart, there can be no distinction but scale. The loops that link repeated language may be broader in Wordsworth, but the obstacle of subjective measurement leads us to examine efficiency through the repeated language itself. Although H.D.'s language is terse, Wordsworth might as easily defend his longer circumlocutions as

maximally efficient: except by measuring the emotional effect of each poem—an impossible task—such a comparison is futile.

In my discussion of Stein, I determined that the primary definition of an efficient system involves comparative self-reference (instead of comparative external reference). As Evelyn Cobley explains, "efficiency" without reference is empty of meaning. When I tweak her definition to specify *self*-reference, efficiency must be defined as a process. In Wordsworth this process was readily apparent because of his profusion of repetitious loops, both broad and narrow. Simpson clarifies the primary differences between Wordsworth and Pound by addressing the attention given to the *process* of producing meaning through poetry:

Pound has little time for a poetry which dramatizes a meditation upon its object, as opposed to a direct presentation of it; he is reacting against the Wordsworthian persona or "speaker" as he struggles with the activity of trying to make poetry, to achieve "meaning," thus bringing to attention the status of the subject as it interprets and perhaps

even manipulates the messages it purports to receive from nature. (Simpson 662) Apparently, Pound believes that the concision of H.D.'s poetry offers an image in a single moment and that its brevity precludes the possibility that she dramatized the process efficiency. Further, he believes that, as a scientist removes herself from an object of empirical examination, the *subject*, H.D., removes herself from her images. But we have already, in the quintessential Imagist poem, unsettled this belief in efficiency without process, and H.D. often discloses her images through a speaker. The repetitions in "Oread" unquestionably signal a journey from imperfect towards perfect efficiency.

Pound's credulity with regard to objectified emotion offers a fascinating contrast to Wordsworth's tentative approach to what I have called the upper boundary of meaning. The

latter approaches it with skepticism. Simpson suggests that, ironically, Wordsworth's stance better suits modern perspectives on art and interpersonal communication: "in his determination to at least suggest the fallibility of the perceiving subject [Wordsworth] is casting doubt both on the capacity of language to embody objects and on its efficiency as a means of communicating the same ideas to different minds" (662). Whether perfect efficiency is possible as Pound suggests, or unattainable, as Wordsworth demonstrates, the pursuit of perfect efficiency in poetry inevitably causes recursive patterns to arise.

5. H.D.'s Repetitions

While "Oread" presents one example of recursive language, H.D.'s contributions to Vorticism, Imagism, and her personal collections, contain a multitude of supporting evidence. In her work, I would like to examine two principal varieties of repetition: repetitions of subjects and repetitions of objects.

In H.D.'s "The Wind Sleepers," the plural subject "we" accumulates meaning through a number of precise tidal images. Alone, these images live up to the professed sufficiency and hardness Pound prescribed, but, as they are gradually gathered into the "we," they illustrate a process. H.D. writes, "we are stung by the hurled sand / and the broken shells" (lines 4-5). "We" appears again in lines 6 and 8, which would provoke no comment except that the Imagists' rigorous principles demand rigorous attention. We must ask why H.D. has chosen to return to the plural subject rather than employ an elliptical construction. The narrative elements of the second stanza seem to demand that these subjects be spoken for the sake of clarity, but their recurrence sheds doubt upon the "sufficiency" of previous instances. If H.D. intends fidelity to the objectified emotion, and if the completed objectified emotion requires one or more recursive motions, then what can we say of the reader's experience within the poem? As more images and

associations are merged with the "we" throughout the course of the poem, does the objectified emotion remain constant or does it only reach its full effect at the poem's end? These questions may seem excessively fastidious, but since Pound has recommended the poetic equivalent of perfect efficiency, any inconsistency demonstrates a divergence of theory and practice. If Imagism falls short of perfect efficiency, it cannot easily distinguish itself from the patterns manifest in this study's other poets, who try but fail at perfect efficiency.

The return of the subject brings a particular nuance to the question of perfect versus imperfect efficiency. The first person subject employed here evokes both writer and reader in a poem that purports to contemplate an external object. The imaged figure of the writer (or writers) named as "we" participates in whatever patterns are laid down in the poem, and, because these patterns are reflexive, the writer is defined (to the reader) progressively and with increasing specificity. The unique emotion that the Imagists intend to communicate depends upon prompt definition, so progress of any form contradicts their explicit intention.

While "The Wind Sleepers" offers repetitions that are hardly more generous than those in "Oread," "Night" is saturated with recurrent language:

The night has cut each from each and curled the petals back from the stalk and under it in crisp rows;

under at an unfaltering pace, under till the rinds break,

back till each bent leaf

is parted from its stalk (lines 1-9)

Through repetition H.D. expresses the plurality of petals and the relentlessness of the night, and both effects are cumulative. The recurrences of "each," "under," and "back" denote progress through repetition. If Pound's claim stands, that "an 'Image' is that which presents an intellectual and emotional complex in an instant of time," H.D.'s poetry cannot stand with it ("A Few Don'ts" 200). Her predominant mechanism in this poem, repetition, creates a vivid and emotionally charged image. H.D. attempts to capture emotion by returning to a central idea and increasing specificity. For example, "under" gathers the descriptive modifiers "in crisp rows," "at an unfaltering pace," and "till the rinds break." H.D.'s language accumulates specificity by doubling back on itself, which is precisely how an efficient process progresses, but this progress depends more extensively upon a temporal than an instantaneous frame. Pound's insistence upon instantaneity cannot tolerate this accumulation of emotion. Accumulation in any form denotes a process, which contradicts the instantaneity upon which Pound insists.

Any examination of time and progress in H.D.'s poetry calls to mind the role of rhythm in Imagism. Imagism's few, concise principals dethroned traditional rhymes and meters, not forswearing their use, but acknowledging that their efficacy was limited. Instead, Pound and others experimented with *vers libre*. Pound explained that "progress lies rather in an attempt to approximate classical quantitative metres (NOT to copy them) than in a carelessness regarding such things" (*Literary Essays* 13). In this early conception of free verse, meters were often integrated, but fleetingly, remaining intact only as long as a natural, conversational tone warranted it. Pound's interest in *vers libre* creates an interesting tension within his larger aesthetic system. No rhythm, traditional or otherwise, can exist except through the progress of

time and the accumulation of another medium, language in the case of the Imagists. By investigating the Imagists' interest in rhythm, I hope to move closer to the core tenets of Pound's theory and determine whether it is in practice as inhospitable to our sense of efficient poetry as it seems.

6. Vers Libre

While H.D.'s earliest poems demonstrate a comprehensive and perhaps ascendant interest in the Greek strophe, her rhythms developed, in part by the direction of Pound, into dynamic and fluid structures that generally favored the subtler effects of alliteration and slant rhyme over the end rhyme that the Imagists often scorned in Victorian poetry. Pound argued that the dynamic nature of the emotions they hoped to capture necessitated the dynamic approach of *vers libre*. According to Coffman, Pound "argued that each emotion has an absolute rhythmical pattern which alone gives it adequate expression" (134). But how can a rhythm produce an emotion, if an emotion also derives from an "instant of time"? I find that there is no reconciling this jagged discontinuity in Pound's theory except to say that these two positions represent two intentions that, when regarded as one, form a process.

In H.D., Pound found a natural aptitude for these rhythms, and he encouraged her to invest herself in the strophic forms put forth in Hellenistic poetry. He found that the young poet had a special knack for shifting from one rhythm to another as the poem's emotional object demanded. According to Hughes, "It requires careful attention, as well as a considerable knowledge of H.D.'s sources of inspiration, to distinguish where the Greek poets leave off and the modern poet begins" (117). Of the Greek meters, Pound and H.D. were most impressed by the versatility of the "strophe." It could attend to whatever rhythms a poem required. Coffman concludes that "if each emotion has an appropriate rhythm, then the poet can be bound by no

conventional rules, and metrical patterns will be as varied as the emotions themselves" (135). The Imagist poets were not constrained to fill a meter as water fills a bucket; instead, they insisted that they could match rhythms, without waste, to their objects. But I return to the inescapable incongruity of rhythm and concision. Whether it is constituted by identical language, identical sounds, or identical shapes on the page, rhythm denotes a return, and the implied redundancy of any return troubles the Imagists' simultaneous profession of efficiency.

Edward Fletcher^{xvii} identifies the circularity of the strophe, but his description could easily apply to any rhythm: "Not only must the syllables so fall as to increase and continue the movement, but the whole poem must be as rounded and recurring as the circular swing of a balanced pendulum" (Fletcher 196). I have discussed a number of recursions in H.D. that seem quite concise when we compare them with those of Wordsworth, but, as I have been arguing, concision is not synonymous with efficiency. Efficiency is instead equivalent to the increase in concision, and this increase demands internal references.

When Fletcher explains the fundamental circularity of the strophe, he infers that the Imagists could not employ the strophe and still claim that their poetry represented the superlative of concision. Superlative concision cannot tolerate the recurrences upon which a rhythm is built. Fletcher insists that the strophe cannot be separated from circularity and thus from repetition:

Each strophe is a complete circle: in fact, the meaning of the Greek word "strophe" is simply that part of the poem which was recited while the chorus were making a turn round the altar set up in the centre of the theatre [....] Of course the circle need not always be the same size, nor need the times allowed to negotiate it be always the same. (Fletcher 198)

While the strophic rhythm implies perpetuity, concision implies conclusion; any rhythm establishes one of the circular patterns Fletcher describes, and a circle has neither beginning nor end, but concision cannot coexist with perpetuity. As in Wordsworth and the Vortex, cyclic patterns only conclude if they are also restrictive, if they spiral inward toward some ideal. The only possible reconciliation of Pound's simultaneous insistences upon rhythm and concision are the reflexive and restrictive patterns that I have ascribed to efficiency.

H.D.'s application of the strophe at times replicates sounds or rhymes to indicate a completed cycle, but as often she employs basic repetitions. In "Sea Gods," "violets" demarcates a number of cycles. Her insistence upon the word leaves the reader wondering at its function in the poem. I suggest that the rhythmic length of each cycle guides the reader to place greater or lesser significance upon each new parcel of imagery that accumulates:

But we bring violets,

great masses-single, sweet,

wood-violets, stream-violets,

violets from a wet marsh.

Violets in climbs from hills,

tufts with earth at the roots,

violets tugged from rocks,

blue violets, moss, cliff, river-violets. (lines 20-27)

If the Imagists strive for objectified emotion, H.D.'s intended object is clear. The flowers that stand at the poem's center accumulate a variety of modifiers in these stanzas, but the disparities between the modifiers offer the only texture for the image. The loops that return to "Violets" are

each composed of a number of modifiers, "from a wet marsh," for example, and to each of these loops we may apply the Imagists' criterion of concision as a measuring tool.

Pound's aspiration to "maximum efficiency of expression" has been long interpreted as "maximum concision of expression," but if we apply this definition to "Sea Gods," H.D.'s poem is in fact a veritable celebration of inefficiency. Expecting concision, we find instead that, for instance, "violets in climbs from hills, / tufts with earth at the rocks," offers an objectively inferior image to "blue violets." Rather than denote "concision," Pound's "efficiency" must indicate a process, one that ostensibly defies his "instant of time," but accommodates his interests in efficiency and rhythm. If we may read "Sea Gods" through a restrictive and reflexive sense of efficiency, each successive modifier leads the reader nearer the central image, with each return to violets cutting a bit "nearer the bone." If we take Pound's theory seriously in H.D.'s poem, it is no more possible to read the last loop of "violets" first than for a lathe to remove an inner layer before an outer. Only by stripping away, cutting away the artifice of the abstract sense of "violets," can H.D. arrive at an "efficient" image.

The Imagists' efforts to re-imagine poetry as an art oriented about an objectified emotion set them apart from their predecessors. The traditional rhymes and meters that they opposed seemed to assert arbitrary structures as the object of poetry, rather than the content that filled those lines. Pound described and H.D. employed rhythms that sought to discover their objects of study in the same manner a physicist discovers a pre-existing law, and Pound implies that this association with the scientific method means that the poet is merely the servant of the image. Yet, as my chapter on Vorticism argued, Pound's interest in a scientific poetics transmogrified into a distinctly authoritarian aesthetic disposition.

7. The All-Mighty Image

Pound's tendency towards despotic leadership appears early, in his conflict with Amy Lowell and in his correspondence with the Imagists; and its coincidence with an aesthetic theory that describes the poet as unbiased raises questions about the inconsistency between Imagism's theoretical leadership and poetic production. If H.D. enacts the "scientific" aspects of Imagism by attempting to reveal objectified emotions as if revealing pre-existing objects, where does Pound procure the authority to judge and delegate aesthetics? Perhaps we can begin to associate these twin forces with Adorno and Horkheimer's senses of science as action and Enlightenment as guidance. I would now like to gather Imagism into the broader conversation of this study. By investigating Pound's unscientific guidance of H.D.'s scientific poetry, I intend to demonstrate that efficient poetry begins with the desire to form closed-systems and that, beyond the scope of poetic production, these closed-systems associate the advocates of efficient poetry with the hubris fueling perfectionism and its manifold social implications.

Like efficient industrial processes, efficient poetic processes are concerned with two materials: the useful and the wasteful. Much of the rhetoric that I have identified thus far frames Imagism in terms of the *useful*, which is the objectified emotion that lies beneath the waste. Pound refers to this, more simply, as the Image. Part of the reason that Pound's theories do not attend carefully to the waste is because he assumes any good poet—any Imagist—could not fail to identify and eviscerate wasteful verbiage. This is why Pound scorns Wordsworth, for inscribing the whole tedious process of efficiency. Yet, I have demonstrated in H.D.'s poetry that the Imagists could not escape the repetitions that indicate processes of efficiency. As Pound failed to render the Vortex with the degree of lucidity that he envisaged, he also failed to inspire

Imagist poetry that was free from signs of waste. By considering the discrepancies between the Imagists' theory and practice, I hope to identify the cause of the dream of perfect efficiency.

Published in 1917, H.D.'s second collection, *The God*, arrives at a moment when the Imagists had just begun to disperse to pursue independent projects, never again to collaborate under that name. H.D.'s poem "Pygmalion" considers the roles of artist and artwork and acknowledges their co-dependence in such a way that she upsets the scientific distinctions between subject and object. At the same time she might be read as questioning Pound's past influence over Imagism, or even read as questioning artists as legislators of meaning in general. Although Pound rendered the roles of poet and poetic object with clarity, his forceful leadership troubled his professions of scientific objectivity. "Which is the god, / which is the stone," wonders H.D., and in this terse question, she strikes violently at the supposed application of the scientific method in Imagism (lines 11-12). H.D. has not only suggested that the artist participates in the creation of the artwork (which discomfits Pound's notion of the objectified emotion) but she also suggests that the artist depends upon the art to establish her identity.

Although "Pygmalion" has been read as a terse reiteration of the enduring reciprocation of artist and artwork, when it is framed in terms of efficient poetry, the implications are quite significant. This passage offers an unexpected take on an often-evoked intercourse between creature and creator:

I made god upon god step from the cold rock, I made the gods less than men for I was a man and they my work

and now what is it that has come to pass?

for fire has shaken my hand,

my strivings are dust. (lines 27-33)

H.D. inverts the roles of creator-god and creature-man, a move which at first seems to invoke the hermeneutics of suspicion and the cynical accusation that man created god in his image. However, H.D. steps beyond this first level of irony, and the poem's speaker emphasizes failure to accomplish the goal of creating "god." H.D.'s narrative challenges its reader with a number of circular confusions of cause and effect, with the speaker creating a god (a fire) from rock, which then actually succeeds at displacing the speaker-creator, by shaking her with fire.

I will consider H.D.'s poem by assuming the ambition of perfect efficiency to correspond to "god" in this passage. The Imagists intended poetry of superlative efficiency, and so it is not inconceivable that the "god" she refers to in "Pygmalion" refers to the idealized image, which is elsewhere described as an objectified emotion. Again, as in "The Contest," H.D. borrows the language of sculpture to describe the creation of the god, and she thereby models a poetics of efficiency that determines material as wasteful or useful. Further, she names the created god "arrogance," which possibly criticizes the hubris of perfectionism in art. When she considers the possibility of creating a god, a perfect poetic formulation, H.D.'s profound conclusion is that the artist will be "shaken" by her own inadequacy. H.D. had come to acknowledge the conundrum of seeking perfect efficiency in art. Pound's theory and its assumption of perfectibility compel H.D. to conclude that peerless artwork will necessarily dominate its artist-creator if that creator is less than perfect. Of course, when H.D. concludes that perfect artwork will dominate its imperfect creator, she diverges from Pound's faith in the perfect artist.

Pound failed to recognize the recursive patterns in H.D.'s poetry because his aesthetic theory could not tolerate the possibility that an image of perfect efficiency always escapes the artist. According to Simpson, Pound intended in Imagism to create "an absolute denotative language; one which is outside time, and one which stands in an authoritarian relationship to its readers" (668). Simpson moves to the strong language of denotation because Pound compared the poet's authority over emotion to the scientist's over the material world. Pound's is a self-established and unassailable station; he is *the* legislator of emotion. As there is one physics, Pound searched for a unified poetry, one standard against which all else could be examined. Notably, when Pound discovered the Japanese *Noh*, a form of drama built around a single emotion, he departed from his interest in concision, while strengthening his interest in a single purpose. According to Pound, the plays exhibited what he named the "Unity of Image" (Fennollosa and Pound 45).

The themes of this study have discovered—often in improbable places—the will to return to or collapse upon a singular and central idea, emotion, or image, and in each instance I have revealed the poets' interest in arriving at a unified and sealed system. The perpetual motion machine best illustrates this interest, by passing energy in a circular pattern that establishes a rigid barrier across which no energy may pass. At times, it is difficult to distinguish the hypothetical perpetual motion machine from the hypothetically perfect Imagist poem. While most art invites participation by communicating experiences with which its audience may examine their own, objects of perfect efficiency occasion something quite different.

The perpetual motion tinkerers sought a machine that could accomplish no task and interact with no other entity; they sought a closed system. It might seem that Pound's Imagism differed on this point because its poetry conceivably offered the reader a superlative aesthetic

experience, but Pound's insistence upon scientific objectivity actually refuses to make room for the reader. An emotion stripped of all excess would prohibit a reader's participation in much the same way a law of physics resists interpretation. The objectified emotion may not distort itself to cooperate with the reader's fluctuating, subjective experience. However, the reader may conform to the objectified emotion. Gage explains that Pound believed "if all were given the same means of perception all would see the same truth" (171). Pound did not intend to multiply the audience's experiences through the Image, but to unify them. On this point I form the critical bridge between the reader-less and writer-less notion of objectified emotion and Pound's very active and very intentional direction of the Imagists.

An ideal Imagist poem would hold up an image of perfection against which its audience might measure their degree of imperfection. They might then attempt to discover in themselves experiences commensurate with the emotional clarity that the Imagist has rendered, or else choose the path of recalcitrance that defies the superlative emotional judgment of the poet. Thus, the true Imagist poem demands the conformity of its audience. Although Pound pointedly ignores the audience in his Imagist theory, he inspires art that offers him profound powers of judgment over the unpoetic public.

When H.D. wonders at the end of "Pygmalion "does this fire carve me / for its use," she acknowledges the reciprocation of influence between poem and poet, but she insinuates an endless cycle of creation (lines 57-8). Earlier in the poem, the art proves more powerful than the artist and begins to "seek [the artist] in the dark," but if the art-god ends by carving the artist, the reciprocation may be imagined in perpetuum, creation-creator endlessly carving creator-creation (line 26). Yet H.D.'s cycles do not move from the chaotic "fire" towards the controlled "stone," as the recursive and restrictive patterns of efficiency demand, but rather the reverse. The graven

creature takes on more violent and domineering properties until it climactically procreates. Efficient systems approach perfection, but this point proves to be like Lucretius's *clinamen*, where perfection chaotically deteriorates. H.D. seems to have discovered by 1917 that an artist in search of mastery and perfection may instead expect chaos and by that chaos she may expect to be mastered. Pound could only assert his theories of perfect efficiency because he had grown blind to his imperfections as a critic. Had he recognized, what H.D. later recognized, that perfection—even its dream—destroys each observer in turn and at last its creator, then perhaps he could have withdrawn from the precipitous journey upon which he embarked in Imagism.

Chapter VI. Complete but Narrow

"no poet, no artist of any art, has his complete meaning alone"

-T.S. Eliot (1919)

T.S. Eliot claims to perceive a predictable relationship between objects and their emotional content through the "objective correlative," a theoretical precept which at first seems akin to what I have described as Pound's "objectified emotion." Yet, Eliot suggests that the objective correlative can be determined by carefully considering past poetry that is included in the literary canon. Despite their mutual insistence upon objective measures of literature, Eliot and Pound stand upon opposite shores of a wide gulf. Eliot's interest in the canon implies the kind of external reference that Pound scorned during his Imagist and Vorticist years. Although the theory of the former has been since criticized for its dependence upon what turns out to be a limited set of texts, Pound's efficient system insists that no reference is permissible in Imagism. I have demonstrated the inevitable failure of Pound's inflexible claims, their impossibility in art, and the social hazards of such a system. Eliot asserts a broad referential milieu (that is in fact limited) while Pound asserts an isolated milieu (that opens itself in practice), but together they provoke us to wonder at the effect of such poetical extremes. Eliot's absolute reference and Pound's absolute isolation both prove impossible in practice, and so those artists that apply either method only ever approach their goal, and only through many iterations and improvements of diminishing return.

Today, both Pound's and Eliot's ambitions resonate within a variety of applications, technical, literary, and otherwise. When I worked as an engineer in the competitive aerospace industry, I was instructed in the techniques of LEAN manufacturing, which involve the

elimination of waste in industrial and business applications. While LEAN manufacturing offers some significant improvements upon, for instance, Henry Ford's crushing standards of efficiency, it still carries with it some weighty implications. Tahlil M. Azim^{xviii} describes the ambiguous line between labor and laborer as an object of efficiency. He explains that "critics condemn the new system as being a production regime that results in work intensification, very little autonomy for workers, a more subtle system of management control and a concomitant decline in workers' bargaining power" (204). Tahlil evokes the lingering question from this study, what should be left out of an efficient system? When Evelyn Cobley directs her readers' attention to efficiency's role in the atrocities of mid-century National Socialism, she vividly illustrates its potential for evil. Yet, I urge against the overly-facile conclusion that efficiency's deleterious effects—though some are inevitable—condemn efficiency unilaterally.

On a planet where more and more people compete for fewer and fewer resources, efficiency has become absolutely necessary for the protracted survival of humanity. For example, ecological sustainability demands a rigorous and comprehensive application of efficiency, and consequently much *must* be left out.

I should note that the hope of global ecological sustainability bears resemblances to both Pound's narrow efficient system and Eliot's broad "tradition." I return to two geometric references that I employed early in this study: I referred to efficiency as a complete and narrow circle, but the second attribute actually privileges a certain sense of efficiency, one that, like the spinning top, passes energy by a simple route. The analogy privileges those systems which, with few parts, elegantly articulate the allure of perpetuity. But simplicity does not denote efficiency. I have determined that the isolation of a closed system is the sole measure of an efficient system, and so Eliot's interest in breadth does not actually exclude his theory from the conversation. The
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hope of a sustained planet is the same hope that a machine with many, many parts may nonetheless operate without waste.

I conclude, then, by contrasting *broad* efficiency and *narrow* efficiency. Henry Dircks finds particular fault with the tinkerer who acts "independent of his predecessors and therefore frequently re-invent(s) as new some exploded fallacy" (xv). Despite Dircks' tendency to avoid the "why" for the "what," these words offer a compelling critique of the narrow sense of efficiency. The inventors to which he refers attempt to construct—in addition to a closed energy system—a closed system of thought that does not incorporate the failures of the past. Here, Dircks does not explicitly demand an end to the pursuit of perfect efficiency, but rather a widening of efficiency's scope. Rather than Wordsworth's inwardly-spiraling lathe, Dircks recommends a process of efficiency that spirals outward toward a more comprehensive system. Perhaps the clearest example of this broad but complete system comes through Gertrude Stein's poetry. Her poetry seeks out vivid complexity that can still be contained within a single "portrait."

Although every poet in this study demonstrates efficiency through closed systems and repetition, they each offer unique characteristics under that label. Stein and H.D. attempt to multiply meaning within their respective closed systems, Portraits and Images. Conversely, Wordsworth and Pound assert order through lathe-like processes. While I have found that Wordsworth admits that language cannot exhaust meaning, Pound believed an image could be made complete. Alone among these four figures, Pound insists upon restriction and completion.

I have investigated the failure of Pound's Imagist and Vorticist theories, and I have discovered that their flaw comes from excessive narrowness. Pound could not account for the idiosyncrasies of his social moment, of his literary associates, or even of his own language.

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Thus, Cobley's criticism of Nazi philosophies of efficiency finds application with Pound, too. She concludes that "inhumanity is not confined to 'occasional breakdowns' in rational behavior but proves to be fully compatible with our desire for rational order" (109). I also recall W.L. Duffy's keen observation that "reason and homicidal mania can coexist" (157). Although Pound's later propaganda is rarely as explicitly vicious as the monomaniacal characters that Duffy examines or the Nazi allies of his Fascist associates, he endorses a disturbingly similar thought process. In fact, the etymological composition of "monomania" suggests two common characteristics. Pound encouraged art that, through *obsessive* fixation (-mania), created art narrow to the point of *singularity* (mono-). Pound insists upon completion, closure, and sufficiency.

Each of the other poets in this study demonstrates that, even when words may progress no further, complete meaning is neither accessed nor exhausted. Their repetitions indicate that perfect efficiency stands beyond the access of the poet. Something always escapes, and my investigation of Pound indicates that this is a good thing. When he was arrested in 1945, his faith in Fascism met with rough treatment of the democratic majority. However, one does get the impression that during his imprisonment at St. Elizabeth's psych ward between 1945 and 1958 Pound came nearest to spinning his complete and narrow circles. During his custody in 1956 Ezra Pound charged "the jews" with the opening of one particular large and troubled American system: "It is perfectly well known that the fuss about 'de-segregation' in the U.S. has been started by the jews. Plenty of americans have been getting on quite nicely with coloured people for nearly a century. ("de-segregation" 6) Pound's expressed racist conspiracy theories are various during his stay at St. Elizabeth's, though doctors noted that he rarely demonstrated a diminished capacity for reason or argumentation. Apparently, his societal delusions coexisted

with logic that was often *complete*. But every tautology exhibits this kind of logical completion. If one suffered from the delusion that all one's neighbors were conspiring against him, his argument might prove impervious to most reasonable counterarguments: every conspiracy, he would argue, attempts to conceal its own existence. We consider this a delusion because, though *complete*, it offers a simplistic account of society. I have explained that this proceeds from his interest in efficient poetry, and efficiency does not aspire to veracity, but completeness. Pound's explanation of mid-century America languishes due to its rhetorical *narrowness*, its inability to describe life in all its complexity. Pound's pursuit of perfect efficiency had cut away excess until all that was left was the tautology of means as ends, efficiency for efficiency, the perfect rhythm of an imperfect machine.

Notes

ⁱⁱ "Monomania and Perpetual Motion: Insanity and Amateur Scientific Enthusiasm in Nineteenth-Century Medical, Scientific and Literary Discourse"

ⁱⁱⁱ "Status Rerum"

^{iv} "After All One Must Know More Than One Sees and One Does Not See a Cube in Its Entirety':

Gertrude Stein and Picasso and Cubism"

^v "Gertrude Stein's Melodies: In Anticipation of the Loop"

vi "From Order to Chaos: Michel Serres's Field Models"

vii "Wyndham Lewis' Authoritarian Temptation"

viii "Nature, History, and Anti-Nature in Ezra Pound's Fascism"

ix "Surrounded by a Multitude of other Blasts': Vorticism and the Great War"

^x "Wyndham Lewis, *Blast*, and Popular Culture"

xi "Fascist Aesthetics: Ezra Pound's Cultural Negotiations in 1930s Italy"

xii "Two Voices, One Channel: Equivocation in Michel Serres"

xiii The Rhetoric of Efficiency in Early Modernism"

xiv "A Few Don'ts"

^{xv} "Paradoxes of Objectivity and Argument in Imagist Theory"

^{xvi} "Pound's Wordsworth: or Growth of a Poet's Mind"

^{xvii} "Imagism—Some Notes and Documents"

xviii "Human Resource Management in 'Lean Production': A Critical Analysis"

ⁱ "A Defense of Tautology"

Works Cited

Aldington, Richard. "The Poetry of Ezra Pound." The Egoist 2.5 (1915): 71-72.

- Alexander, Jennifer Karns. *The Mantra of Efficiency: From Waterwheel to Social Control*. Baltimore: Johns Hopkins University Press, 2008. Print.
- Assad, Maria L. "From Order to Chaos: Michel Serres's Field Models." *SubStance* 2, no. 2 (1991): 33-43.
- Azim, Tahlil M. "Human Resource Management in 'Lean Production': A Critical Analysis." Indian Journal of Industrial Relations 36.2 (2000): 203-217.
- Barbarese, J.T. "Ezra Pound's Imagist Aesthetics: Lustra to Mauberly." The Columbia History of American Poetry. New York: Columbia University Press, 1993. 284-318. Print.
- Barnes, David. "Fascist Aesthetics: Ezra Pound's Cultural Negotiations in 1930s Italy." *Journal* of Modern Literature 34, no. 1 (2010): 19-35.
- Bennett, Paula "Late Nineteenth-Century American Women's Nature Poetry and the Evolution of the Imagist Poem." *Legacy* 9.2 (1992): 89-103.
- Benton, Tim. "Dreams of Machines: Futurism and l'Esprit Nouveau." *Journal of Design History* 3, no. 1 (1990): 19-34.
- Bewell, Alan. Wordsworth and the Enlightenment: Nature, Man, and Society in the Experimental Poetry. New Haven and London: Yale University Press, 1989. Print.
- Bowler, Ann. "Politics as Art: Italian Futurism and Fascism." *Theory and Society* 20, no. 6 (1991): 763-794.
- Brown, Steven D. "Michel Serres: Science, Translation and the Logic of the Parasite." *Theory Culture Society* 19, no. 1 (2002): 1-27.

- Bryer, Jackson R. "H.D.: A Note on Her Critical Reputation." *Contemporary Literature* 10.4 (1969): 627-631.
- Casillo, Robert. "Nature, History, and Anti-Nature in Ezra Pound's Fascism." *Papers on Language & Literature* 22, no. 3 (Summer 1986): 284-312.
- Coats, Jason M. "'Part of the War Waste': Pound, Imagism, and Rhetorical Excess." *Twentieth Century Literature* 55.1 (2009): 80-113.
- Cobley, Evelyn. "Efficiency, Modernism, & Ideology." *Modernism and the Culture of Efficiency: Ideology and Fiction.* Toronto: University of Toronto Press, 2009.
- Coffman, Stanley K. Imagism: A Chapter for the History of Modern Poetry. New York: Octagon Books, 1972. Print.
- Coleridge, Samuel Taylor. *Biographia Literaria*. Eds. James Engell and W. Jackson Bate. Princeton, NJ: Princeton University Press, 1985.
- ---, and William Wordsworth. Lyrical Ballads. New York: Penguin, 1996.
- Conroy, Mark. "Wyndham Lewis' Authoritarian Temptation." *Southern Humanities Review* 30, no. 1 (1996): 21-38.
- Deleuze, Gilles. *Difference and Repetition*. Paul Patton. Trans. New York: Columbia University Press, 1994. Print.
- Delville, Michel. "Gertrude Stein's Melodies: In Anticipation of the Loop." *Texas Studies in Literature and Language* 55.1 (2003): 72-83.
- Dircks, Henry. Perpetuum Mobile; or, Search for Self-Motive Power. London: E. & F.N. Spon, 1861. Web.
- ---, and Félix Guattari. Nomadology: The War Machine. Los Angeles: Semiotext(e), 1986. Print.

Doolittle, Hilda, and Richard Aldington, eds. Some Imagist Poets: An Anthology. Boston: Houghton Mifflin Company, 1915. p. 28. Web.

---. Collected Poems of H.D. New York: Liveright Publishing, 1925. Print.

- Duffy, W.L. "Monomania and Perpetual Motion: Insanity and Amateur Scientific Enthusiasm in Nineteenth-Century medical, Scientific and Literary Discourse." *French Cultural Studies* 21.3 (2010): 155-166.
- Durrant, Geoffrey. Wordsworth and the Great System. London: Cambridge University Press, 1970. Print.
- Ellmann, Maud. *The Poetics of Impersonality: T. S. Eliot and Ezra Pound*. Cambridge, MA: Harvard University Press, 1987. Print.
- Engell, James. *The Creative Imagination: Enlightenment to Romanticism.* Cambridge: Harvard University Press, 1981. Print.
- Eliot, T.S. "Tradition and the Individual Talent." The Egoist 6.5 (1919):72-73.
- Fahy, Thomas. "Iteration as a Form of Narrative Control in Gertrude Stein's 'The Good Anna.'" Style 34.1 (2000): 25-35.
- Feldman, Bernard J. "What to Say About the Tacoma Narrows Bridge to Your Introductory Physics Class." *The Physics Teacher* 41, no. 92 (2003): 92-96.
- Fennollosa, Ernest, and Ezra Pound. 'Noh': Or Accomplishment, A Study of the Classical Stage of Japan. New Orleans: Pelican Publishing, 1999. Print.
- Firchow, P.E. "Ezra Pound's Imagism and the Tradition." *Comparative Literature Studies* 19.3 (1981): 379-385.
- Fletcher, Edward G. "Imagism—Some Notes and Documents." *Studies in English* 26 (1947): 184-208.

Flint, F.S. "The History of Imagism." The Egoist 2.5 (1915): 70-71.

- ---. "Imagisme." Poetry 1.6 (1913):198-200.
- ---. "The Poetry of H.D." The Egoist 2.5 (1915): 72-73.
- Flory, Wendy Stallard. *The American Ezra Pound*. New Haven, CT: Yale University Press, 1989. Print.
- Freind, Bill. "Why do you want to put your ideas in order?': Re-Thinking the Politics of Ezra Pound." *Journal of Modern Literature* 23, no. 3-4 (Summer 2000): 545-564.
- Francois, Anne-Lise. *Open Secrets: The Literature of Uncounted Experience*. Stanford: Stanford University Press, 2008. Print.
- Gage, John T. "Paradoxes of Objectivity and Argument in Imagist Theory." *Philosophy & Rhetoric* 12.3 (1979): 153-175.
- Hilder, Jamie. "After All One Must Know More Than One Sees and One Does Not See a Cube in Its Entirety': Gertrude Stein and Picasso and Cubism." *Critical Survey* 17.3 (2005): 66-84.
- Horkheimer, Max, and Theodor W. Adorno. *Dialectic of Enlightenment*. Trans. John Cumming. New York: Herder & Herder, Inc., 1972.
- Hartnet, Stephen. "The Ideologies and Semiotics of Fascism: Analyzing Pound's Cantos 12-15." Boundary 2 20, no. 1 (Spring 1993): 65-98.
- Hayles, Katherine D. "Two Voices, One Channel: Equivocation in Michel Serres." *SubStance* 17, no. 3 (1988): 3-12.
- Hiscox, Gardner D. Mechanical Appliances, Mechanical Movements, and Novelties of Construction. New York: Norman W. Henley Publishing Company, 1917. Web.

Hughes, Glenn. Imagism and the Imagists. Stanford: Stanford University Press, 1931. Print

- Hummels, Harry, and Jan de Leede. "Teamwork and Morality: Comparing Lean Production and Sociotechnology." *Journal of Business Ethics* 26.1 (2000): 75-88.
- Inception. Dir. Christopher Nolan. Perf. Leonardo DiCaprio, Joseph Gordon-Levitt, Ellen Page. Warner Bros., 2010. Film.

Jeffrey, Lloyd N. "Wordsworth and Science." The South Central Bulletin 27.4 (1967): 16-22.

Johnson, Barbara. A World of Difference. Baltimore: Johns Hopkins University Press, 1987. Print.

- Johnson, Lee M. Wordsworth's Metaphysical Verse: Geometry, Nature, and Form. London: University of Toronto Press, 1982. Print.
- Lindstrom, Eric. "Prophetic Tautology and the Song of Deborah: Approaching Language in the Wordsworth Circle." *European Romantic Review* 23.4 (August 2012): 415-434.

Lewis, Wyndham. "The Machine." Modernism/Modernity 4, no. 2 (1997): 171-174.

- ---, ed. Blast: Review of the Great English Vortex, Number 1. London: John Lane, The Bodley Head, 1914.
- ---, ed. Blast: Review of the Great English Vortex, The War Number: 2. London: John Lane, The Bodley Head, 1915.
- Ma, Ming-Quian. "'In an Instant in Time': The Imagist Perception and Phenomenology of the Upsurge." Analecta Husserliana LXXXVI. Ed. Anna-Teresa Tymienieka. New York: Springer Publishing, 2007. 47-63.
- Marinetti, Filippo T. "The Futurist Manifesto." *Three Intellectuals in Politics*. Ed. James Joll. Nabu Press, 2011. Print.
- Materer, Timothy. "The English Vortex: Modern Literature and the 'Pattern of Hope." *Journal of Modern Literature* 3, no. 5 (1974): 1123-1139.

- McCurdy, Edward. Leonardo Da Vinci's Note-Books: Arranged and Rendered into English. Kent: Kent Press, 2007. Print.
- Mehri, Darius. "The Darker Side of Lean: An Insider's Perspective on the Realities of the Toyota Production System." *Academy of Management Perspectives* 20.2 (2006): 21-42.
- Meyer, Steven. Irrisistible Dictation: Gertrude Stein and the Correlations of Writing and Science. Stanford: Stanford University Press, 2001. Print.

Mills, Allan A. "Leonardo da Vinci and Perpetual Motion." Leonardo 41.1 (2008): 39-42.

- Morris, Adelaide. "Science and the Mythopoeic Mind: The Case of H.D." *Chaos and Order*. Ed. Hayles, Katherine N. Chicago: University of Chicago Press, 1991.
- Neubauer, John. "Reflections on the 'Convergence' between Literature and Science." *MLN* 118, no. 3 (2003): 740-754.
- Nickels, Joel. "Anti-Egoism and Collective Life: Allegories of Agency in Wyndham Lewis's *Enemy of the Stars.*" *Criticism* 48, no. 3 (2006): 347-373.

Nietzsche, Friedrich. Thus Spake Zarathustra. New York: Penguin Books, 1978. Print.

- Peppis, Paul. "Surrounded by a Multitude of Other Blasts': Vorticism and the Great War." Modernism/Modernity 4, no. 2 (1997): 39-66.
- Pondrom, Cyrena N., and H.D. "Selected Letters from H.D. to F.S. Flint: A Commentary on the Imagist Period." *Contemporary Literature* 10.4 (1969): 557-586.

Pound, Ezra. "A Few Don'ts by an Imagiste." Poetry 1.6 (1913): 200-206.

- ---. "De-Segregation," The New Times 22.16 (1956): 6.
- ---. Literary Essays of Ezra Pound. New York: New Directions, 1968. Print.
- ---. "The Serious Artist." The New Freewoman 1.11 (1913): 213-214.
- ---. "Status Rerum." Poetry 1.4 (1913): 126.

Quinn, Vincent. Hilda Doolittle (H.D.) New York: Twayne Publishers, 1967. Print.

Raitt, Suzanne. "The Rhetoric of Efficiency in Early Modernism." *Modernism/modernity* 13.1 (January 2006): 835-851.

Richards, I. A. Science & Poetry. San Francisco: M.S.G. Haskell House Publishers, 1982. Print.

- Rowland, Philip. "The Undying Lure of Perpetual Motion." *Popular Science* 97.4 (October 1920): 26-29.
- Russel Corinna. "A Defense of Tautology: Repetition and Difference in Wordsworth's Note to 'The Thorn.'" *Paragraph* 28.3 (July 2005): 104-118.
- Salisbury, Laura. "Michel Serres: Science, Fiction, and the Shape of Relation." *Science Fiction Studies* 33, no. 1 (2006): 30-52.
- Schleifer, Ronald. "Wordsworth's Yarrow and the Poetics of Repetition." *Modern Language Quarterly* 38.4 (1977): 348-366.
- Serres, Michel and Bruno Latour. *Conversations on Science, Culture, and Time.* Trans. Roxanne Lapidus. Ann Arbor: University of Michigan Press, 1995.
- ---. The Birth of Physics. Manchester: Clinamen Press Ltd., 2001. Print.
- ---. "Science and the Humanities: The Case of Turner." Substance 83 (1997): 6-21.
- Sieburth, Richard. "In Pound We Trust: The Economy of Poetry / The Poetry of Economics." *Critical Inquiry* 14.1 (1987): 142-172.
- Simpson, David. "Pound's Wordsworth: or Growth of a Poet's Mind." *ELH* 45.4 (1978): 660-686.
- Steinman, Lisa M. Masters of Repetition: Poetry, Culture, and Work in Thomson, Wordsworth, Shelley, and Emerson. New York: St. Martin's Press, 1998. Print.

- Stein, Gertrude. Tender Buttons: Objects, Food, Rooms. Los Angeles: Sun & Mood Press, 1946. Print.
- ---. "Portraits and Repetition." Lectures in America. Boston: Beacon Hill, 1957. Print.
- Taylor, F.W. *The Principles of Scientific Management*. New York: Harper & Brothers Publishers, 1919. Web.

Tuma, Keith. "Wyndham Lewis, Blast, and Popular Culture." ELH 54, no. 2 (1987): 403-419.

- "Utility" 706.03(a) III . Rejection of Claims. *uspto.gov*. U.S. Patent and Trademark Office. 27 March 2014. Web.
- Webb, David. "Microphysics: from Bachelard and Serres to Foucault." *Anfelaki* 10, no. 1 (2005): 123-133.
- Wees, William C. "Ezra Pound as a Vorticist." *Wisconsin Studies in Contemporary Literature* 6, no. 1 (1965): 56-72.
- Wordsworth, William, and Samuel T. Coleridge. *Lyrical Ballads*. 2nd ed. Ed. R.L. Brett and A.R. Jones. London: Routledge, 1991. Print.