

Axiomatic Modernism:
Poetics, Logic, and Mathematics in the Early 20th Century

by

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For Henry Stellar and Alfred Stanley

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ABSTRACT

Axiomatic Modernism:
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This project draws out the parallels between the linguistic and epistemological shifts explored in literary modernism and the foundational crises in mathematics and logic at the turn of the twentieth century. I demonstrate how early twentieth-century aesthetic theories, poetic practices, and philosophical investigations participate in a distinctly modernist turn in mathematical thinking, where philosophers, mathematicians, and verbal artists questioned the relationship of classical mathematical forms to logic, language, and the world. This modernist shift in aesthetic and mathematical thinking—from typology to topology, simple equations to more contingent algorithms, and closed systems/totalities to paradigms of complexity—does not abandon the precision of mathematical thinking or the prospect of fundamental truths. Rather, these thinkers continue to engage in what I call an “axiomatic method,” attempting to produce fundamental axioms for logically representing phenomena that can incorporate the necessary vagueness and incompleteness in formalized systems. I comment on the resonances of the dialectical cartwheels of axiomatic modernism with the mathematical turn in recent continentally-inflected philosophy, where the “new metaphysics” enlists the axiomatic to combat discourses of linguistic access and the human-world gap in order to offer new theories of ontology.

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INTRODUCTION

Axiomatic Modernism

Noting the favorite genre of English literature, you'll find few proponents of the axiom, that hallowed ideal of rationality, ancient to modern—a foundational statement or proposition elevated to self-evident or absolute status. The favored poem, in all its metaphorical promise and enigmatic intensity, seems antithetical to the axiom's confidence in its own enduring exactness. Perhaps this results from the presumptions that poets are to ask questions, not give answers and that art is to maintain the secrets of the universe, to inhabit complexity rather than minimize mystery. The axiom is a reductive agent; it takes the pleasure out of the poetic contemplation of consciousness or nature. Even Emily Dickinson, known for her sophisticated understanding of the potential cohesion of scientific and poetic forms of knowledge making, falls prey to this commonplace in "The Skies Can't Keep Their Secret" (1862):

The skies can't keep their secret!

They tell it to the hills—

The hills just tell the orchards—

And they the daffodils!

A bird, by chance, that goes that way

Soft overheard the whole.

If I should bribe the little bird,

Who knows but she would tell?

I think I won't, however,
 It's finer not to know;
 If summer were an axiom,
 What sorcery had snow?¹

Here the secrets of the universe are a bit of burning gossip that nature, set apart from the human, reveals only to itself. Our human speaker has a chance at bypassing nature's riddles by bribing a non-human intermediary, but ultimately decides that "It's finer not to know," as the pleasures of nature may evaporate in scientific formulation. If "summer were an axiom," then its thrills, like the "sorcery" of winter or by extension the wonders of spring and fall, would be lost.

But say we choose not to "dwell in possibility" with Dickinson and instead afford poetry the capacity to generate definitive knowledge. In that case, there is the conception that art's purchase on the truth of the human condition is necessarily *superior* to the methods of science or philosophy, discourses which, because they allegedly trade in unchanging absolutes, cannot grasp the contingent complexities of the social. In Canto 6 of his "Phantasmagoria" (1869), mathematician-cum-poet Lewis Carroll parodies the discourse of logicians and philosophers on social life. The poem follows a conversation between the narrator and a visiting phantom about the

¹ Emily Dickinson, *Poems Volume 2*, eds. T. W. Higginson and Mabel Loomis Todd (Boston: Little, Brown, and Company, 1898), 131. The poem was given the title "Secrets" by the editors, listed on the title page of this volume as "two of her friends." As Todd notes in her 1891 preface, "As a rule, the verse were without titles" (8) and most indexes of Dickinson poems will list the poem by first line, "The skies can't keep their secret!" The poem is numbered by several Dickinson scholars as toward the end of the first few hundred Dickinson poems, putting its composition most likely in 1862.

order of ghostly culture, its social hierarchies and various “maxims of behavior.”

After beginning to bicker with the phantom auto-ethnographer, the narrator attempts to pull apart the logic of ghost society and convince the ghost of his superior reasoning in a parody of logical ratiocination:

So I, that had resolved to bring

Conviction to a ghost,

And found it quite a different thing

From any human arguing,

Yet dared not quit my post

But, keeping still the end in view

To which I hoped to come,

I strove to prove the matter true

By putting everything I knew

Into an axiom:

Commencing every single phrase

With “therefore” or “because,”

I blindly reeled, a hundred ways,

About the syllogistic maze,

Unconscious where I was.²

Attempting to reduce “everything” he knows into “an axiom” in order to provide

² Lewis Carroll, *Phantasmagoria and Other Poems* (Amherst, NY: Prometheus Books, 1998), 59. First published in 1869.

unassailable truth to the ghost, the narrator loses himself in his own rhetorical labyrinth and produces nothing more than a word-salad of logical terms. Unimpressed, the phantom subsequently responds: “that’s regular clap trap.”³ Neither the narrator nor the ghost emerge as much more than inept sophists. Through presenting the rigid rules, types, and classes of phantom society as a ridiculous spectacle, Carroll comments on the strangeness of giving a logical formalization to social complexity, i.e., naturalizing the social order through any application of the presumed self-evidence of scientific axioms. Instead, poetry, whether serious or absurd, emerges as the fitting medium for explaining the workings of the social, both reflecting its lived realities and interrogating its ideology.

Growing out of this sense that the social cannot, or ought not, to be captured in scientific formulation, is perhaps the most urgent bias against the axiom, an ethical one. On the whole, modern and postmodern literature offer a caution that universals and absolutes lead to totalitarianism, and a conviction that it is art’s unique appointment to combat totalizing discourses. That is, if science attends to matters of fact, art must attend to matters of concern. In the “The Shield of Achilles” (1952), Auden famously contrasts the vines and olive trees of a Greek pastoral to the barren landscape of a barbed-wire enclosed, weed-choked lot, and the poetically lauded war heroes and athletes of Greek history to the soldiers of the World Wars, who “died as men before their bodies died.”⁴ At the same time, he compares the

³ *Ibid.*, 59.

⁴ Wystan Hugh Auden, “The Shield of Achilles,” in *Selected Poems*, ed. Edward Mendelson (New York: Vintage, 2007), 207.

idealistic “logic” and “axioms” of Greek thought to the totalizing logic of industrialized warfare.⁵ In Auden’s poem, the consequences of adapting ancient first principles to modern behavior—such as Homeric interpretations of the glories of war to war’s modern incarnations—are disastrous: “They marched away enduring a belief / Whose logic brought them, somewhere else, to grief.”⁶

The poem argues that the niceties of Homer’s ekphrastic poem about the portrayals of Greek life on Achilles’s shield have no place in the bleak modern framework. In turn, the word “axiom,” emblem of the Greek commitment to philosophy as a quest for knowledge and reason, is given a new valence in the modern order of things. Near the close of the poem a “ragged urchin, aimless and alone” plays foil to the Greek hero’s “iron-hearted man-slaying” in his casual attempt to stone a bird.⁷ The poem suggests, however, that the boy’s glib cruelty and Achilles’s venerated battle victories are derived from the same axiomatic system of cruelty. Auden focalizes the axioms of modernity through the urchin:

That girls are raped, that two boys knife a third,
 Were axioms to him, who’d never heard
 Of any world where promises were kept
 Or one could weep because another wept.⁸

Here “axioms” are not the replicable laws of the universe promised by scientific knowledge, but the ironic promise that all promises will be broken and the reality of sexual and other physical violence. The horror is heightened because of its banality;

⁵ *Ibid.*, 206, 207.

⁶ *Ibid.*, 206.

⁷ *Ibid.*, 207.

⁸ *Ibid.*

the lack of empathy and the inevitability of brutality as “axioms” are thus (despairingly) uncontroversial, normal, and natural—self-evident. This suspicion of violent totality colors Auden’s use of mathematical terms. In the poem the State wields mathematics to justify war, as a voice over a loudspeaker “proved by statistics that some cause was just.”⁹ The insidious logic of the State infects not only the soldiers in the poem but the “ordinary” onlookers, producing an “unintelligible multitude” compliant to the State’s narrative.¹⁰

If we look at the Carroll and Auden examples together, the “axiom” emerges as a symbol of rigid order. To the extent that we take literary modernism as a criticism of nineteenth-century values and social order, of the bourgeois, and of a naïve-realist worldview, we assume that modernism, as a mode of representation, rejects linearity, cause and effect, rationality, and universality—across the board. But we should remember that the rejection of totalizing cohesion in political, moral, or religious principle, while reflected in the content of modernist expression, need not and should not be the descriptive paradigm for all the formal principles of modernist expression. Paradoxically, though post-war modernism reflects a devastating awareness of the failures of naïve beliefs in the progress of civilization, the specter of totalitarian governments does not prevent modernist art from continuing to offer schematics for understanding, and even shaping, the world.

In fact, aesthetic modernism was in the business of generating axioms. This literary period is characterized by a proliferation of theories which sometimes outstripped aesthetic output, including manifestos and slogan-like injunctions

⁹ *Ibid.*, 206.

¹⁰ *Ibid.*

raised to the level of maxims. One quickly thinks of “The Futurist Manifesto,” “Concerning the Spiritual in Art,” or “A Few Don’ts by an Imagiste.”¹¹ Many of the foundational descriptions of our critical discourse on modernism are propositions taken directly from the artists themselves. We derive critical theorems, such as the claim that modernism breaks down conventional formulas for representation, from such axioms provided by artists: “make it new,” “ornament is a crime,” “form follows function,” “less is more,” “no ideas but in things.”¹² Aesthetic modernism’s generation of such slogans is widely characterized as a relentless rejection of the axioms of the previous age: Enlightenment thinking, notions of history, civilization, and technology as inherently progressive, Victorian morality, art as social refinement, language as a stable system, the ideology of realism, and so on. This study intervenes in and nuances that line of thinking, situating aesthetic modernism,

¹¹ F. T. Marinetti, 1909; Wassily Kandinsky 1910; Ezra Pound, 1913.

¹² Ezra Pound’s phrase “make it new” wasn’t actually used until 1928, in a translation from a passage in Da Xue. He also used the phrase for a title in his 1934 collection of essays, *Make it New: Essays by Ezra Pound* (New York: Faber, 1934). For a history of the phrase and its use/misuse, see Michael North, *Novelty: A History of the New* (Chicago: University of Chicago Press, 2013). “Ornament is crime” is a paraphrase of the arguments in Austrian architect Adolf Loos’ 1908 essay “Ornament and Crime,” which gained popularity after its publication in 1913 in *Cahiers d’aujourd’hui*. For more information see Janet Stewart, *Fashioning Vienna: Adolf Loos’s Cultural Criticism* (London: Routledge, 2000). “Form follows function” is the leading axiom of modernist architecture and industrial design in the twentieth century, and its origin is in the repetition of the phrase “that form ever follows function. This is the law” in American architect Louis H. Sullivan’s essay “The Tall Office Building Artistically Considered” in *Lippincott’s Magazine* (March, 1896): 403-409. “Less is more” is actually a line from Robert Browning’s 1885 poem “Andrea del Sarto (Called ‘The Faultless Painter’),” and was a common proverb in the late nineteenth century. The concept became closely associated with minimalism in architecture mainly through its use by German modernist architect Ludwig Mies van der Rohe. “No ideas but in things” is usually attributed to Book I of William Carlos Williams’ *Paterson*; that section was published in 1946. But the phrase appears in an earlier poem, “A Sort of Song,” from his 1944 collection, *The Wedge*.

rather than at a point beyond the Victorian zeal for theories of everything, at a moment crucially involved in the distinctly scientific endeavor of formulating axioms aimed at functional totalities. The modernist questioning of those fundamental axioms of our knowledge—whether philosophical, cultural, or mathematical—is not characterized, I argue, by either a wholesale rejection of the axiomatic, nor by a merely cynical sense of loss of meta-narratives.

Leading up to the first World War, there was an intense hope across many disciplines to finish out the dream of the nineteenth century, discover the theory of everything, and ground all knowledge in fundamental axioms. We see this particularly in Bertrand Russell and Alfred North Whitehead's pursuit of foundational logic and Einstein's quest to fully replace Newtonian mechanics, but also in more interpretive, anti-positivist schemas such as Sigmund Freud's homeostasis or Max Weber's force of rationalization. We might even trace this further to mid-century, noting the axiomatic bent in literary criticism, particularly the harmonious self-regulation imposed on the poetic text by the New Critics. This angle of modern thought is often juxtaposed to postmodern thought in dichotomies emphasizing modernity's totalizing project and postmodernism's concomitant rejection: completeness-incompleteness, order-disorder, equilibrium-chaos, stasis-flux, transcendental signifiers-undecidability, autonomy-network. Avant-garde aesthetic modernism is hailed as countering the cardinal values attributed to modernity, expressing the de-centralizing of the system, subject, and state, and thus finds ample synergies with postmodern theory.

But such all or nothing, black and white definitions of the avant-garde and

the high modern ignore the fact that they coexisted in the same time frame and possessed members attributed at different times to each camp. A more nuanced analysis is needed. Rather than rehash aesthetic modernism as a wholesale rejection of order in favor of chaos, mimesis in favor of abstraction, or of materialism in favor of phenomenology, I will show that early twentieth-century aesthetic theories and poetic practices participate in a distinctly modernist turn in mathematical thinking, where the linguistic turn and the new mathematics intersect, producing new forms of precision while at the same time acknowledging fundamental instability. This turn found philosophers, mathematicians, and verbal artists questioning the relationship of classical mathematical forms to logic, language, and the world—yet, still attempting to produce fundamental axioms for logically representing phenomena.

In each chapter, I examine the “axiomatic method” in modernism—that is, the production of tenets in poetic, logical, and mathematical theory that involved identifying foundational elements, constructing systems with rubrics that could be definitively stated, and the manipulation of signs according to set rules, applicable to infinite extensions. Literary modernism abounds with gestures toward the axiomatic. One useful example can be found in Ezra Pound’s *ABC of Reading* (1934), labeled by publisher New Directions as “a concise and direct statement of Pound’s aesthetic theory” and by Pound in one of the prefatory pages as “impersonal enough to serve as a text-book.”¹³ This “text-book” speaks to the applicability of scientific methods to literature, and offers items labeled as exhibits, exercises, tables,

¹³ Ezra Pound, *ABC of Reading* (New York: New Directions, 1987), 11.

problems, laboratory conditions, tests, and other sections modeled on scientific textbooks. Pound's ideogrammic method for representation of things in language, modeled as much on the clean precision of mathematical thinking as on Chinese characters, he argues, is

very much the kind of thing a biologist does (in a very much more complicated way) when he gets together a few hundred or thousand slides, and picks out what is necessary for his general statement. *Something that fits the case, that applies in all of the cases.*¹⁴

In other words, according to Pound, the ideogrammic method was to provide a foundational axiom for representation—one which be proven in all cases, and from which all cases can be derived.

In attempting this axiomatic method, aesthetic modernists often modeled their mimetic enterprise on abstract mathematics and generated formulas for formalizing aesthetic practice that borrowed elements from (or in some cases anticipated the advances of) the emerging “new” mathematics, such as set theory, topology, and game theory. They use the language of mathematics and logic to do “epistemic work,” a phrase Peter Middleton has used to describe how mid-century poets used the language of physics.¹⁵ My study draws parallels between the animating concepts in mathematics, logic, and aesthetic representation which cohere around the quest for new foundations for formal systems grounded on the notion of the axiom, and details the common struggles in these disciplines to

¹⁴ *Ibid.*, 22. Emphasis mine.

¹⁵ Peter Middleton, “Poetry, Physics, and the Scientific Attitude at Mid-Century,” *Modernism/modernity* 21.1 (January, 2014): 147-168.

maintain order and continuity in a schema, and the common anxieties about the relation between abstract representational schemas and the everyday world. For both Pound and Stein, the main exemplars of axiomatic modernism in this project, the intense generation of poetic theory within and alongside their poetry parallels the projects of contemporaneous mathematicians, in three major trends— attempting to strip away historical assertions of fact and lay bare primitive notions in order to axiomatize a representational system using language, discovering that within any complex system there are, and will always be, inherent paradoxes and limits, and creatively incorporating those paradoxes to push beyond these limits while remaining committed to rigor and precision.

Equally important to this project is the understanding that mathematicians and logicians were just as aware as modernist poets of the need for new axioms, that these axioms needed to be *made* rather than *discovered*, and that the true complexity of experience consistently outstrips even the most developed mathematical modeling.¹⁶ For thousands of years after Euclid and the invention of

¹⁶ Though I will offer my own reasons throughout this project for using the term “modernist” to describe emerging mathematical discourse and forms in the early twentieth century, I am not the first scholar to grant the appellation of modernism to mathematical thought from this period. That said, scholars who make these connections are still a small set. In his *Moderne Sprache, Mathematik* (1990), Herbert Mehlert was the first to explore the overlap between modernism and the new mathematics at any length, focusing particularly on the use of language (for more on Mehlert’s study, published in German, see Jeremy Gray *Plato’s Ghost: The Modernist Transformation of Mathematics* [Princeton: Princeton University Press, 2008], 9. Gray explicitly applies the lens of aesthetic modernism to mathematics in *Plato’s Ghost* and his discussions of the abstraction and formalism of modernism aligning with the treatment of mathematics by Cantor and others aligns with mine, though his study focuses on philosophical Platonism in modernist mathematics. The most useful study to lay out the history and stakes of a “modern” turn in

axiomatic reasoning, philosophers and mathematicians considered axioms to be self-evident truths, assumptions that required no proof. One of the major attentions of mathematical thought in the nineteenth century was to provide definitive philosophical justification for the (alleged) necessity and *a priori* nature of mathematics. This project faced considerable difficulty when, in 1888/89, newly proposed axioms for an arithmetic system by Italian mathematician Giuseppe Peano and German mathematician Richard Dedekind unseated the primacy of Euclid's axioms, which had been sufficient virtually without modification for about two thousand years.¹⁷ The notion that Euclid's axioms could not describe the whole of mathematics, that there are *geometries*, rather than simply a *geometry*, set off a foundational crisis in mathematics. The emerging field of analytical philosophy offered to give mathematics a foundation in logic, rather than the previously held to be self-evident axioms of Euclid. But at the turn of the century fundamental cracks in that logic began to appear, and mathematicians, philosophers, and thinkers of many stripes began to either try to patch them up or rip them open.

Many of the problems which beset giving mathematics new foundations in logic stemmed from reevaluating the relationship between mathematics and language. Traditionally, mathematics had been set apart from other epistemological enterprises, occupying a special realm inoculated against the vagaries of ordinary

mathematical thought is William Everdell's *The First Moderns: Profiles in the Origins of Twentieth-Century Thought* (Chicago: University of Chicago Press, 1997).

¹⁷ For Dedekind's 1888 publication on the theory of numbers, see *From Kant to Hilbert: A Source Book in the Foundations of Mathematics*, ed. William B. Ewald (Oxford: Oxford University Press, 1996), 787–832. For Peano see Jean Van Heijenoort's *From Frege to Gödel: A Sourcebook in Mathematical Logic, 1879-1931*. (Cambridge, MA: Harvard University Press, 1967), particularly 83-97.

language and the fuzzy phenomenality of the real world. Understood as our best hope for gaining definitive knowledge of the physical world and of understanding and even predicting the seeming intricacies of human behavior, mathematics is *the* language for the “laws” of the universe. After all, the father of “modern” science, Galileo, claimed in *The Assayer* (1623) that the book of nature is written in the language of mathematics.¹⁸ But up until the twentieth century there was little reflection on the inherent conflict in Galileo’s marrying of the allegedly pre-analytic status of “nature” and a highly abstract symbolic system like “language.” Analytical philosophers and mathematicians began questioning the semantics, form, and logic of mathematical assertions. What objective truth value can be located in mathematical statements when they are asserted *in language*? The linguistic turn in mathematical and philosophical thinking coalesces around Gottlob Frege, the early work of Ludwig Wittgenstein, Bertrand Russell, and Alfred North Whitehead. Part of this program took shape in “logicism”—mapping mathematics onto logic to show the inherent truth of arithmetical knowledge by demonstrating its conformity to reduced logical systems. This project seemed to work fine for basic arithmetic and natural numbers. But to extend the project of a logical foundation for mathematics to more complex mathematical theories—such as higher order geometry and set theory—and to incorporate infinity, logically, into a finite system, proved impossibly

¹⁸ See Stillman Drake, ed., *Discoveries and Opinions of Galileo* (New York: Anchor Books, 1957), 238:

[T]his grand book, the universe [. . .] stands continually open to our gaze. But the book cannot be understood unless one first learns to comprehend the language and read the characters in which it is written. It is written in the language of mathematics, and its characters are triangles, circles, and other geometric figures without which it is humanly impossible to understand a single word of it; without these one is wandering in a dark labyrinth.

difficult, in no small part due to the strange behavior of language.¹⁹ Language emerges as both the problem and the solution.

Literary modernism has often been understood as a foundational crisis,²⁰ whether we start our story amid the *fin de siècle* demolition of literary tradition, or we date the crisis to the collapse of idealism in the devastation of the First World War. Both versions of the crisis of modernism hinge on an evaluation of the adequacy of language for giving form to experience. In both mathematical philosophy and literary experimentation, there is a shared concern for the habits and conventions of language, specifically in projects which sought linguistic control in order to impose order on the mutiny of meaning and the anarchy of contemporary history.

The axiomatic modernism that I detail in this project seeks to re-cast the axiom using the model of the scientific method, augmenting previous knowledge through integrating new knowledge. Figures like Pound, Stein, Woolf, and Eliot indeed aimed at replacing what they saw as outdated commonplaces about the

¹⁹ The emerging field of early quantum theory was to further muddy the waters. While quantum theory questioned the classical relationship of mathematics to ordinary objects in a moment that discovered the strangeness of phenomena on a quantum level, at the same time mathematics emerges as potentially the *only* way to grasp the strange behavior of the sub-visible. That is, the boundary between the abstract and the concrete is not clearly legible when some objects of the real world can only be “known” mathematically. For a study of the intersections of modernism and the scientific discourse that visualizes the sub-visible—that is, the “image” in a scientific context—see Daniel Tiffany’s *Toy Medium: Materialism and Modern Lyric*. (Berkeley: University of California Press, 2000).

²⁰ Though I take the language of “foundational crisis,” to a point, to demonstrate the parallel examination of “foundations” in logic, mathematics, and art in this period, I suggest that modernism is not antithetical to foundationalism; foundations are not done away with, even in radical, experimental modernist texts, as evidenced by the extensive interest in generating foundational axioms.

nature of truth, language, the social world, or reality itself, but they did not produce statements of absolute contingency; rather they generated similarly rigorous formulae and models, though their axioms may have sounded alien to the dominant paradigm.²¹ For example, Stein's well-known modernist axiom of identity shifts from Descartes' "I think, therefore I am"²² to "I am I because my little dog knows me."²³ Pound similarly rewrites Descartes when he quips, "One says 'I am' this, that, or the other, and with the words scarcely uttered one ceases to be that thing."²⁴ Axioms of causality such as Aristotle's "We only have knowledge of a thing when we know its cause"²⁵ or Spinoza's "Cognition of an effect depends on, and involves, cognition of a cause"²⁶ becomes, in Stein's system of *Tender Buttons*: "a single action caused necessarily is not more a sign than a minister."²⁷ Hobbes' admonition that "science is the knowledge of consequences, and dependence of one fact upon another" is transformed into Woolf's dictum:

²¹ This aligns with Jürgen Habermas's claim that modernity could not "borrow" its criteria for thinking and living from "another epoch"—it needed to create new norms out of itself (*The Philosophical Discourse of Modernity* [Cambridge: Polity Press, 1987], 7), but detracts from a critical view of modernism as a dramatic "break" from the past (cf. Renato Poggioli, *Theory of the Avant-Garde* [1962] [Cambridge: The Belknap Press of Harvard University Press, 1981]).

²² René Descartes, *A Discourse on Method, Project Gutenberg*, Part IV, paragraph 1.

²³ This phrase and its variants appear in *The Geographical History of America* (1936), *Everybody's Autobiography* (1937), and *Four in America* (1947).

²⁴ From Ezra Pound's 1914 essay "Vorticism" in the *Fortnightly Review* 96.1 (September, 1914): 461–471. Reprinted in Ezra Pound, *Gaudier-Brzeska: A Memoir* (New York: John Lane Company, 1916), 100.

²⁵ Paraphrase of Aristotle's comments on causality in *Metaphysics*, trans. W.D. Ross. (Stilwell, KS: Digireads, 2006.)

²⁶ Benedict de Spinoza, *The Ethics, Project Gutenberg*, Axiom IV of Part I.

²⁷ Gertrude Stein, "BREAKFAST," *Tender Buttons*, in *Selected Writings of Gertrude Stein*, ed. Carl Van Vechten (New York: Vintage Books, 1990), 485.

Let us record the atoms as they fall upon the mind in the order in which they fall, let us trace the pattern, however disconnected and incoherent in appearance, which each sight or incident scores upon the consciousness.²⁸

The allegedly Aristotelian platitude that “a whole is greater than the sum of its parts” is remade in Picasso’s “my picture is a sum of destructions.”²⁹

But Picasso’s sum is still in the realm of the *additive*, the positive: “I do a painting and then I destroy it. But in the end, it is not lost—the red I wiped from one part appears in another part in another place.”³⁰ When we understand modernism as synonymous with the critique of wholeness, as principally reactionary and destructive, we ignore the generative *purpose* of experimentation, what is *built* after modernist art overturns the foundations on which it rests.

In seeking out *new* foundations, the figures I examine engage in a project of linguistic control by getting at the foundations of language and principles of representation. This pursuit leads them to recognize that the axiomatic-deductive method is flawed, that complex systems necessarily involve a measure of vagueness and incompleteness. But I argue these discoveries need not be coded as simply examples of the modernist lament at the failure of modernity’s totalizing spirit.³¹

²⁸ From Virginia Woolf’s “Modern Fiction” essay, written in 1919 and published in 1921. See full essay in *The Essays of Virginia Woolf Volume 4: 1925 to 1928*, ed. Andrew McNeille (London: The Hogarth Press, 1984), 157-165.

²⁹ Christian Zervos and Pablo Picasso, “Conversation avec Picasso,” *Cahiers d’art* 10.10 (1935): 173.

³⁰ *Ibid.*

³¹ Much of modernist criticism recognizes the rage for order and pursuit of unity in modernism, much as I do in this project, but nevertheless predominantly understands that pursuit through the discourse of nostalgia, regret, and loss, rather than aspiration. For example, Terry Eagleton writes,

Examining the common concerns about language and mimesis in literary modernism and mathematical philosophy allows us to see each in new ways. Analytical philosophy attempted to perfect representation by rejecting outdated symbolism, stripping representational systems of excess, annihilating association, much like the poetic theory of Stein and Pound. In 1933, with his Incompleteness Theorem, Kurt Gödel proved that no theoretical system is strong enough to prove its own consistency. But rather than halting all efforts to provide axioms for formal systems, discoveries like Gödel's opened new avenues for thought, new branches of mathematics, and more sophisticated understandings of the feedback loops inherent in complex systems. And for aesthetic modernists, recognizing the paradoxes and limits of logical formalization led to new avenues of poetic construction. I trace the emergence within aesthetic and mathematical texts of a modernist shift—from typology to topology, closed systems to paradigms of complexity, insuperable paradox to dynamic generation.³²

Modernism proper is old enough to remember a time when there was still truth, reality, foundations, a coherent subject, the possibility of freedom and justice, and is still haunted by a nostalgia for this alluring world, not least in the way the modernist work of art still strives for unity, turning around an absent center or glimpsing a dim foundation which disappears as soon as you look straight at it.

Terry Eagleton, "Contradictions of Modernism," in *Modernity, Modernism, Postmodernism* (Santiago de Compostela, Galicia, Spain: University of Santiago de Compostela Press, 2000), 35.

³² It should be noted that there has been a vibrant community of scholars studying the overlap between aesthetic modernism and modern physics. See particularly Daniel Albright's *Quantum Poetics: Yeats, Pound, Eliot, and the Science of Modernism* (Cambridge: Cambridge University Press, 1997); Michael H. Whitworth, *Einstein's Wake: Relativity, Metaphor and Modernist Literature* (Oxford: Oxford University Press, 2001); Bruce Clarke, *Energy Forms: Allegory and Science in the Era of Classical Thermodynamics* (Ann Arbor: University of Michigan Press, 2001); Bruce Clarke and Linda Dalrymple Henderson, eds. *From Energy to Information: Representation in*

In Part One, “Gertrude Stein and Early Twentieth-Century Logics,” I examine the logical formulations in Gertrude Stein’s early publications, particularly *The Making of Americans*, “Sacred Emily,” and *Tender Buttons*, alongside the discourse of set theory initiated by Georg Cantor and the emerging discipline of analytical philosophy, particularly work by Gottlob Frege, Bertrand Russell, Alfred North Whitehead, and later Kurt Gödel. Chapter One, “Illegitimate Totalities: Stein’s Modernist Typology” details the conceptual homologies between Stein’s investments in types and kinds and mathematical philosophy at the turn of the century. I read Stein’s *The Making of Americans* alongside Russell and Whitehead’s *Principia Mathematica*, both exhaustingly long volumes which attempt to either articulate or demonstrate fundamental axioms for infinite extension. In so doing, each text encounters limits and paradoxes, particularly the famous Barber Paradox, a paradox of self-reference. In the *Principia*, Russell and Whitehead dispense with self-referential paradoxes as “illegitimate totalities” and construct a logical way out of these vicious circles via the grotesquely complex theory of types. I show how Stein’s narration at the end of *The Making of Americans* turns ironic, critiquing its own enterprise in the face of insuperable paradox, and the poetry that follows is composed in such a way that deftly accounts for language and logic’s self-referential

Technology, Art and Literature (Stanford: Stanford University Press, 2002); Paul Tolliver Brown, “Relativity, Quantum Physics and Consciousness in Virginia Woolf’s *To the Lighthouse*,” *Journal of Modern Literature* 32.3 (Spring 2009): 39-62. My study adds to, but also detracts from, this scholarship not only because it begins at an earlier date and examines the foundational mathematics that come to underlie much of this physical and theoretical exploration, but also because my study looks more directly at the scientific concepts emerging within the literary texts, rather than drawing connections across disciplines through primarily analogical and metaphorical means, or through noting the adoption or integration of scientific concepts into literature.

nature, using the paradox as a source of generation rather than immobilizing contradiction.

Rather than abandoning logical forms, however, Stein continues, particularly in *Tender Buttons*, to use the language of logic and mathematics. In Chapter Two, “Impossible Objects: Stein’s Topological Modernism,” I demonstrate how Stein continues to revise and reimagine the classical laws of thought. Through the strange and impossible objects of *Tender Buttons*, Stein finds ways to draw together the historical, mathematical, emotional, linguistic, and aesthetic valences of objects, complicating the logics of identity, contradiction, and the excluded middle. *Tender Buttons* attempts to produce a system committed to a kind of exactitude but which can handle the vague, the fuzzy, and change. In her prose-poems, Stein critiques the typological categories of biological taxonomy and the limited scope of naïve set theory, shifting from an approach to being based on type, or kind, to a sense of becoming, paralleling the concepts in a contemporaneously emerging branch of geometry: topology. I argue that Stein is still invested in *Tender Buttons* in a logically mimetic exercise, though it breaks significantly with older modes of mimesis. The labor in *Tender Buttons* to transform the material into words, to find a logic that can account for linguistic indeterminacy without being “random,” and to produce knowledge about objects and perception, is part of a modernist project in both the arts and sciences. Like the philosophers and mathematicians of her time, Stein is beginning to recognize the limits of naïve realism in the logics and mathematics that came before her, but her project in *Tender Buttons* does not abandon a pursuit of exactitude, rigor, and the axiomatic in mimetic practice. Readings of Stein which

fixate on her sophisticated awareness of the instability of the linguistic system discount her participation in this distinctly modern questioning of the relationship between reality and abstraction.³³

Though I separate *The Making of Americans* and *Tender Buttons* into separate “periods” of Stein’s work, characterized by concerns for typology and topology respectively, my overall purpose in Chapters One and Two is to draw out the similarities *in both periods* between Stein’s work, analytical logic, and the emerging mathematics at the advent of the twentieth century. Stein’s writing, particularly in the second period, is often hailed as postmodernist,³⁴ illogical, anti-determinist, even “random.” I demonstrate that Stein’s work, across periods, is heavily invested

³³ In this I agree with critic Jennifer Ashton, who argues persuasively that Stein is engaged in a project of linguistic determinism in order to counter critical notions that Stein’s experiments are “a kind of prescient postmodernism” (see particularly, “Gertrude Stein and the Critique of Indeterminacy,” *Modernism/modernity* 9.4 [November, 2002]: 581-604). Ashton’s work on Stein overlaps with mine in drawing connections between Stein’s poetics and analytical logic, though Ashton is more concerned with Stein’s repetition and rejection of the discourse of “history” and “memory,” and Stein’s theory of “names” as it intersects with Russell’s and Frege’s theories of meaning, whereas I am more concerned with the precise logical forms (sets, groups, syllogisms, etc.) that Stein takes up in her work, and I comment on different connections between Stein and these figures. My discussion of the axiomatic in Stein (and others) I hope adds to Ashton’s cogent analysis, which does not examine the axiom or axiomatic as such.

³⁴ This argument is engaged in more detail in Chapter Two. Some general examples of the ways in which modernist poets, particularly Stein, are brought under the umbrella of postmodern aesthetics (often by way of the L=A=N=G=U=A=G=E poets) can be found in Marjorie Perloff (see particularly *The Poetics of Indeterminacy: Rimbaud to Cage* [Evanston: Northwestern University Press, 1983]) and other 1980s and 1990s modernist scholarship. But as this view has become almost canonical, it continues to inform more recent scholarship, such as Juliana Spahr’s *Everybody’s Autonomy: Connective Reading and Collective Identity* (Tuscaloosa: The University of Alabama Press, 2001) and Barrett Watten’s *The Constructivist Moment: From Material Text to Cultural Poetics* (Middletown, CT: Wesleyan University Press, 2003).

in the discourse of logic and mathematics, and that she rides the line between a desire for logical totalities that marks modernity and the sophisticated response to this impulse that marks *modernism*.

Part Two, “Mathematics in Ezra Pound’s Aesthetic and Social Theory,” details Ezra Pound’s concerted efforts to develop a body of consistent, logical, and persuasive theory for both aesthetic and social objectives. In both chapters I trace Pound’s evolving attitude toward the potential of aesthetic and social axioms through his repeated use of a single image—the chessboard—in his poetry and prose and across several periods of his writing. In Chapter Three, “The Game and Play of Chess: Pound’s Aesthetic Axioms,” I examine how Pound’s early poetic theory suggests ways of modeling social and scientific complexity in concrete terms by borrowing animating concepts from mathematics, particularly analytical geometry. In the pre-war period of Pound’s writing, he uses formulas, equations, and axioms to think beyond the inadequacy he finds in most languages for modeling aesthetic and emotional experiences. I examine Pound’s employment of these aesthetic axioms in his poetry, and detail how his 1915 Vorticist paradigm-poem, “Dogmatic Statement on the Game and Play of Chess (Theme for a Series of Pictures),” models two major paradigm shifts of the early twentieth-century thought, the mathematical shift to non-Euclidean geometry and complexity, and the linguistic turn, both of which had profound implications for logic and the philosophy of mathematics. The poem also bears witness to a shifting paradigm of warfare, and coincides with Pound’s changing attitude toward war, which I examine in Chapter Four, “*Casus Bellorum*: Pound’s Ethical Axioms.” Confronted with the magnitude of

the First World War Pound and other modernists begin to reevaluate the prevailing axioms for literary representation of experience, and consider the role of the artist in producing social, not just aesthetic theory.

I situate Pound's attempt to identify, explain, and convince others of economic truths in terms of his engagement with mathematical forms, particularly in *The Cantos*, which abound with axioms he felt would, if acknowledged and allowed to give order to the world system, prevent war and drive civilization. But Pound struggles to model the system from an "outside," inasmuch as he inserts himself into political affairs as a poet and "economic prophet" and is subsequently drawn into the system of international politics when he is charged with treason. In his failed attempt to model a system from the outside, to explain the complex of history through a limited number of axioms, he reaches similar conclusions as modern mathematics: that any non-trivial system, that is, anything worthy of being called "complex," cannot be reduced to a simple collection of axioms which can be proven consistent and non-contradictory—neither he, nor those aimed at completely formalized systems, can make them "cohere."

In Part Three, "Legacies of Axiomatic Modernism," I comment on the logics that emerge from the modernist period, including the interpretive, aesthetic, political, and philosophical legacies of new attitudes toward the text, the author, and the object. Chapter Five, "The Caesar Problem and the Pound Question: Modernist Authorship and Paradoxes of Self-Reference," concerns the popular imagination and reading practices of critics and the general public receiving modernist texts in the 1930s and 1940s. I return to one of the earliest conundrums in analytical

philosophy: the identity and entity of number, and compare the negotiations of this question by Gottlob Frege, who attempted to establish the ontology of number, to the prevailing literary criticism of the 1940s which attempted to give rigorous, logical definition to the contours of the literary work. I discuss the popular practice for biographically “decoding” the work of Stein, which often involved equating Stein with other geniuses or important world-historic figures, particularly Julius Caesar and Albert Einstein. The mythologizing Stein/Einstein comparison makes clear how modern audiences resisted the separation of author and text despite Stein’s own theorizing of the separation of the “entity” of the work and the “identity” of the writer. I draw another iteration of axiomatic modernism’s influence on the theory of modern authorship from the “case” of Pound. I argue that the New Critics’ influential practices in criticism and study of literature in the universities—reading a poem in isolation and on aesthetic grounds, and establishing a special ontology of the poem so that poet and poetry could be effectively unlinked —blossomed through the reverberations of the controversies surrounding Pound in the 1940s. In conclusion I suggest that this critical axiom (the autonomy of the aesthetic text) and the hermeneutic strategies we continue to employ based on this foundation (close reading) are not only a legacy of the tumultuous investigations of axiomatic logic in the modernist period, but in fact rely on the logic of its central paradox, introduced in Chapter One—the paradox of self-referentiality. Critical negotiations of poetic autonomy separate the authorial “self” from the text by and through a method of treating the text as a self-referencing object.

Critical narratives of modernism tend to label Gertrude Stein’s *Tender*

Buttons (the subject of Chapter Two) and Ezra Pound's *The Cantos* (the subject of Chapter Four), as evidence of either the abject failure or transcendence (through rejection) of modernity's totalizing impulses. In my first four chapters I instead demonstrate how Pound and Stein's work maintains a remarkable loyalty to theories of everything and fundamental axioms, recasting literary modernism's recognition of the impossibility of coherent wholes in correspondence with the same recognition happening in the new mathematics. In my conclusion, "Endgame," I comment on how attention to the axiomatic aims of modernism—that is the generating of robust theories about aesthetic representation, authorship, consciousness, epistemology, and ontology, with renewed efforts at precision and sophisticated understandings of contingency—allows us to counter the existing critical narrative of a bleak artistic sensibility constituted by the bankruptcy of notions of progress or absolutes. I argue against critical narratives that see the failure of modernism's axiomatic aims as merely latent postmodern feeling. As axiomatic modernism allows us to push past these boundaries between modernism and postmodernism, I situate a further legacy of axiomatic modernism in the current mathematical turn in critical theory, examining various texts and thinkers grouped under the umbrella of "the new metaphysics."

The narrative of conceptual change traced through the texts of modernist poetry, mathematics, philosophy, and linguistics in the early twentieth-century in this project establishes the deep, structural similarities between the evolution happening in both mathematics and literature in the period we call modernism, though this homology does not appear to be immediately legible to the wider public

in a century that raised the “two cultures” debate and induced various iterations of the “science wars.” The increasing specialization of branches of thought in the twentieth century and the hardening of distinctions between disciplines, whether practical or rhetorical, has given rise to a persistent vernacular distinction between what we call the “arts” and the “sciences.” The problem of reifying these disciplinary boundaries to the point that we label their forms of knowledge or methods incommensurable is what makes this study necessary, even essential.

Part I: Gertrude Stein and Early Twentieth-Century Logics

CHAPTER ONE

Illegitimate Totalities: Stein's Modernist Typology

In her novel, *Middlemarch*, serialized in 1871-72, George Eliot was already satirizing her century's fantasy for a progressively more rational and ultimately complete theory of everything in the figure of austere scholar Edward Casaubon and his young wife's misplaced enthusiasm for his unfinished (and unfinishable) *Key to All Mythologies*. The first single-volume edition of *Middlemarch* was published in 1874, the year of Gertrude Stein's birth. In typical self-aggrandizing style, Stein would later reflect that even in her "babyhood" she was critiquing precisely the Victorian zeal that Casaubon figures. As she claims in 1943: "between babyhood and fourteen, I was there to begin to kill what was not dead, the nineteenth century which was so sure of evolution and prayers, and esperanto and their ideas."¹ Whether "their ideas" are evolution as a theory of everything, prayers as a metanarrative to structure right action and provide historical meaning, or Esperanto to tame the vagaries of language, Stein criticizes what she sees as the nineteenth century's naïve belief in progress and completeness.² Stein traces the difference between the nineteenth century of her birth and the twentieth of her writing:

¹ Gertrude Stein, *Wars I Have Seen* (New York: Random House, 1945), 21.

² While Stein and other modernist artists did set themselves against what they saw as an uncritical investment in the idea of universal progress in Romantic and Victorian poetry and society, the allusion to George Eliot above stands in as an acknowledgement that Stein's "nineteenth century" is itself an uncritical, in the sense of uncomplicated, picture of a century.

Naturally if you were born in the nineteenth century when evolution first began to be known, and everything was being understood, really understood everybody knew that if everything was really being and going to be understood, and if everything was understood then there would be progress and if there was going to be progress there would not be any wars, and if there were not any wars then everything could be and would be understood [. . .] That was what the nineteenth century knew to be true, and they wanted it to be like that [. . .] and now everybody knows that although everybody is civilised there is no progress and everybody knows even though anybody flies higher and higher they cannot explain eternity any more than before, [. . .] it is rather ridiculous so much science, so much civilization³

Whereas in the nineteenth century, according to Stein, the predominant belief was that “everything was really being and going to be understood” and that scientific and social understanding were built on notions of progress, evolution—“now,” in the twentieth century, “everybody knows that even though anybody flies higher and higher they cannot explain eternity any more than before.” Scientific and social scientific theories-of-everything are here compared to that best-known myth of failed ambition, flying higher and higher and yet falling into an Icarian sea of twentieth-century complexity.

And yet, despite Stein’s dismissal of the nineteenth-century models of a perfect language (Esperanto) and of a fundamental axiom (evolutionary theory), she

³ Stein, *Wars I Have Seen*, 62.

doggedly pursued the axiomatic in her own work. Early on, she attempted to articulate foundational elements of character through axioms of “bottom nature”; in her more experimental work, she set out to refashion the operations of language, though not through invented or constructed languages like Esperanto; as she insisted, “of course you might say why not invent new names new languages but that cannot be done.”⁴ Instead she pursued a stable, replicable, and exact method not just for representing things in words, but also for transforming word into thing. In her writing on writing, Stein forwards theories about language, logic, authorship, and ontology that detract significantly from existing philosophical and scholarly doctrine, yet she nevertheless offers them in a matter-of-fact style, presenting her ideas in the tone of confident self-evidence.

Thus Stein’s characterization of her life’s work as destroying the nineteenth century is not *just* a reaction against a kind of scientism, though we should note that Stein’s most direct engagement with the scientific was in a nineteenth-century mode. She studied under William James at Radcliffe from 1893-1897, going on to a medical degree at Johns Hopkins, which she would abandon in 1901. In her *Lectures in America*, Stein also links science and completeness, in the context of her own late nineteenth-century scientific study:

When I was working with William James I completely learned one thing, that science is continuously busy with the complete description of something, with ultimately the complete description of anything with ultimately the complete description of everything. If this can really be done the complete

⁴ Gertrude Stein, *Lectures in America* (New York: Random House, 1935), 237.

description of everything then what else is there to do. We may well say nothing, but and this is the thing that makes everything continue to be anything, that after all what does happen is that as relatively few people spend all their time describing anything and they stop and so in the meantime as everything goes on somebody else can always commence and go on. And so description is really unending. When I began *The Making of Americans* I knew I really did know that a complete description was a possible thing, and certainly a complete description is a possible thing. But as it is a possible thing one can stop continuing to describe this everything.⁵

Stein's insistence—"I knew I really did know that a complete description was a possible thing"—in the past tense, underscores the paradoxical shakiness and firmness of this conviction. She implies this belief was a nineteenth-century world-view, a paradigm she inhabited while she was working with William James, and that she continued to hold while writing *The Making of Americans*. But she also emphasizes that she knew this when she *began* that epic text, and implies that as she finished the text, she abandoned the project.

Stein began *The Making of Americans* in 1903, then put the project on hold for three years (during which time she completed *Q.E.D.*, and wrote *Fernhurst* and *Three Lives*). From 1906-1908 she again worked on the manuscript, producing what would have been a conventional, bourgeois nineteenth-century family novel.⁶ But from 1908-1909 she completely overhauled the text, finally completing it in 1911 (though it was not published until 1925), and it became a radically innovative book.

⁵ Stein, *Lectures in America*, 156-157.

⁶ Ulla Dydo, ed. *A Stein Reader* (Evanston: Northwestern University Press, 1993), 17.

The novel is a “history” of an American family (or rather, the union of two families, the Dehnings and the Herslands). The subtitle of the novel, “Being the History of a Family’s Progress” does indeed ring true, if you note that the history is more or less chronological, chronicling marriages and births, life changes and deaths, and other key events in a few generations of a family’s history. Despite the indefinite article and singular subject, “a family,” the narrator of the novel professes a project much larger, to derive (or rather accumulate), from the “history of each one” the “history of every one”: “Each one has in him his own history inside him [. . .] every one then has the history in him, sometime then there will be a history of every one.”⁷ One of the novel’s chief concerns, occupying many of its over 900 pages, is to articulate “the being in all men and all women,” doing so through categorizing the “many kinds of men” and “many kinds of women” and “many kinds of ways of mixing them in the children that come out of them.”⁸ This task further necessitates making “complete lists of every body ever living and [. . .] to be making diagrams of them and lists of them.”⁹ Accomplished or not, the narrator’s description of the project, and Stein’s reflections on it afterward, indicate the axiomatic aims of *The Making of Americans*.

The subtitle’s use of “progress,” though it becomes ironic by the end, marks *The Making of Americans* as, in part, a nineteenth-century project, where knowledge not only progresses but progresses toward totality:

Slowly every kind of one comes into ordered recognition. More and more
then it is wonderful in living the subtle variations coming clear into ordered

⁷ Gertrude Stein, *The Making of Americans* (Normal, IL: Dalkey Archive Press, 1995), 191. Subsequent citations “MA.”

⁸ *Ibid.*, 339, 116.

⁹ *Ibid.*, 594-95.

recognition, coming to make every one a part of some kind of them, some kind of men and women. Repeating then is in every one, every one then comes sometime to be clearer to some one, sometime there will be then an orderly history of every one who ever was or is or will be living.¹⁰

We may recall Stein's parody of Victorian thought: "everything was really being and going to be understood" and compare it to a passage near the end of *The Making of Americans*: "there is coming to be a list of kinds in men and women. There will be a list of them. This has been some description of a piece of a list of them. There will be a list of them."¹¹ The comparison forces us to recognize—even accounting for the possibility of Stein's final view of *The Making of Americans* incorporating irony—that Stein's ultimate rejection of the aspiration to totalize included a critique of her own beginnings.

Categories, types, and kinds, the being and "bottom nature" of men and women, charts, diagrams, and lists—all these elements populate *The Making of Americans*, fusing a bourgeois novel of a family saga with a scientific enterprise. But Stein's taxonomy deviates from a nineteenth-century, naturalist style of taxonomy that Stein would have associated with the popular theory of evolution. Instead, *The Making of Americans*, in its attempt to make logical connections between individual characters and universal kinds, types, and "groupings," parallels the style of the emerging discourse of analytical philosophy. The effort in analytical philosophy in the late nineteenth and early twentieth centuries to ground mathematics in a foundation of logic parallels Stein's exploration of the "bottom nature" of being in

¹⁰ *Ibid.*, 284.

¹¹ *Ibid.*, 910.

axiomatic rules for human character. Both the movement in analytical philosophy and Stein's work share a central concern for the ways in which meaning emerges in, and is inhibited by, the strange behavior of language.

Which is not to say *The Making of Americans* emerges as what we might call a logically sound text. The aim of *The Making of Americans* is at odds with the product, and the hypothesis at odds with the model. Stein would describe the modeling, "the putting down," of the phenomena, the "rhythm of a personality that I had gradually acquired by listening seeing feeling and experience" as a struggle: "a great deal of *The Making of Americans* was a struggle to do this thing, to make a whole present of something that it had taken a great deal of time to find out."¹² *The Making of Americans* continually returns to the possibility of completeness, certainty, universality (even as it may be, in its own self-conscious failure, a critique of such notions): this form of composition, this text, the narrator tells us, "is a very certain way of knowing, grouping men and women, understanding, seeing the kind of natures in them, making certain of the resemblances between them. This is then a universal grouping."¹³ In this scheme, grouping is knowing. Understanding is seeing the resemblances amongst people in order to see their "kinds." Ultimately, one can assemble categories, nest other categories, and overlap categories, until there is a category of all categories, a "universal grouping."

As opposed to vague infinity, that universal grouping can be rationalized: "To be completely right, completely certain is to be in me universal in my feeling, to be like the earth complete and fructifying. This is doing talking. I will now begin again. I

¹² Stein, *Lectures in America*, 147.

¹³ Stein, *MA*, 334.

really am wanting to be sometime right about every one.”¹⁴ For the narrator, to feel right, and certain, at the level of the universal, is to be like the earth, to either enumerate every one (to have a system as complete as the earth) or to axiomatize the system so that each one left out, or each one to come, can be productively (fructifying-ly) categorized according to the rules of kind. However, we must again note the potential irony in Stein’s repetitions throughout *The Making of Americans* of terms such as “certain” and “completely,” especially in conjunction with the “I” of the narrator, whose compulsive repetition of her certainty undermines the assertions even as they are made. Rhetorically, the lady doth protest too much.

Nevertheless, the project of *The Making of Americans* is founded on this mathematical concept of “kinds” or, to place it in a late nineteenth-century mathematical context, “sets.” The novel explores, in grotesque detail, the concept of “bottom nature” or character. But the individual is not the basic unit—rather the units are the family, or men, or women. In other words, Stein explores character as a composite set. In the 1870s, German mathematician Georg Cantor developed naïve set theory, a fundamentally new way of treating mathematical objects (such as numbers). Set theory takes groups of objects, or “sets” as its unit of inquiry, rather than individual objects. In set theory, collectivities become mathematical objects in their own right. Just as Cantor shifts from individual objects (numbers, functions, geometric objects, etc.) to groups of objects, Stein attempts to shift from individual “ones” to the “many.” It’s not clear that Stein encountered Cantor’s work directly. She did, however, initially set out to study philosophy when she matriculated at the

¹⁴ *Ibid.*, 574.

Harvard Annex (now Radcliffe) in 1893. Through courses with William James, Hügo Munsterburg, and George Santayana, she was exposed to and read philosophy, which would have included logic and mathematics.¹⁵ The mathematics classes she took at Harvard would have covered the “higher mathematics” of algebra, touching on analytical logic and algebraic logic, though they may have not have gone too far into the further mathematics of calculus and the emerging set theory.¹⁶

Despite the narrator’s mantra-like belief in the possibility of describing being as a “whole one,” to write an “orderly history,” to encounter the “bottom nature in every one,” to make “the subtle variations” become “clear into ordered recognition,”

¹⁵ Stein was secretary of the philosophy club in her junior year and received a C in physics, and a B and C in mathematics her junior year. Commentary on her time at Radcliffe and her grades can be found in Linda Wagner-Martin, *Favored Strangers: Gertrude Stein and Her Family* (New Brunswick: Rutgers University Press, 1995), 36, and many other relevant biographies. See also: Alice P. Albright, “Gertrude Stein at Radcliffe: Most Brilliant Women Student” *Harvard Crimson* (February 18, 1959).

¹⁶ The “higher mathematics” are mentioned in some of Stein’s earliest writing, collected in *Fernhurst, Q.E.D., and Other Early Writings* (New York: W.W. Norton & Company, 1996). In the very first pages of *Fernhurst* (1904) we are introduced to how the “higher mathematics” are characteristic of the university-educated woman of Stein’s moment, though this information is given in the patronizing voice of the antagonist:

The young woman of to-day up to the age of twenty one leads the same life as does her brother. She has a free athletic childhood and later goes to college and learns latin science and the higher mathematics. (Stein, *Fernhurst, Q.E.D.*, 3)

The “higher mathematics” also figure the site of a struggle for educational opportunity, as the character of Miss Thornton reflects:

twenty years ago she was at a friend’s house at Richmond and how there one day she described the struggles of a young woman who was trying to educate herself in the higher mathematics and how a wealthy Richmond woman who was present became interested in the matter and gradually became convinced that there should be the same work for men and women and how this college with Miss Thornton as Dean had been founded fifteen years ago as a result of this chance meeting. “And now” concluded Miss Thornton “it is no longer an experiment, the equal capacity of women and men has been perfectly shown.” (Stein, *Fernhurst, Q.E.D.*, 13).

The Making of Americans ultimately is not a Victorian novel, nor does it cohere in an axiomatic whole. Stein indeed begins to “kill off” the nineteenth century in the piece, wherein “history” and “progress” take on an ironic equivalence with their other: repetition. As Ulla Dydo claims, the work shifts from a “fairly conventional nineteenth-century novel” to a “psychological typology.”¹⁷ But its systematic nature breaks down, as the onerous task of assembling a history of *either* each one or every one becomes impossible. The narrator gradually comes to understand that the task of building from the one, the specimen, to the every one, the whole, is by nature Sisyphean. The individual is too complex, multiple, and incomplete. As the narrator reflects halfway through the project: “Every one was a whole one in me and now a little every one is in fragments inside me [. . .] Perhaps not any one really is a whole one.”¹⁸ Stein’s narrator discovers that in moving between micro and macro scales, getting down to the “bottom ways of being” and then mapping being into “kinds,” it “all grows confusing”:

Making each one a kind of men and women in enough kinds of ways to have everything included in the kinds of them [. . .] That is very exciting, that is very interesting [. . .] always then I am learning more and more of bottom ways of being resembling, always I am learning more and more of the kinds of mixing that are confusing to any one looking, always then more and more there are steadily grouping kinds of men and women to me, more and more I know where each one I am ever seeing belongs in the grouping, more and more then it all grows confusing, I am always knowing more and more and

¹⁷ Dydo, *A Stein Reader*, 17-18.

¹⁸ Stein, *MA*, 519.

then it gets all mixed up to me all mixed up in each one [. . .] I am learning, each time there is in me a clear understanding of any one and I go on to another one or back to one I was earlier understanding that one is all a confusion from the last learning, each time then when there is a clear understanding of any one it is confusing with the next one, knowing more makes more grouping necessary in men and women and then all of a sudden this new grouping is a clear thing to my understanding and then sometimes all of a sudden I lose the meaning out of all of them I lose all of them and then each one I am then seeing looks like every one I have ever known in all my looking and there is no meaning in any of my grouping [. . .]¹⁹

The narrator carries a certainty and pride about her categorizations, but also confusion and exhaustion, as the more she discovers the more things get “mixed up,” and she begins to question the “meaning in any of my grouping.” Further “learning” forces her to retrace kinds, categories, and types, finding that as soon as she fixes them they become confused again. “Resisting” and “attacking,” the two types or kinds which constitute the most stable typology of the text, themselves become confused:

Every kind I have been describing of the resisting kind of men and women can be found with a different action in the attacking kind in men and women [. . .] there are attacking kinds correlative to the resisting kinds I have been describing.²⁰

¹⁹ *Ibid.*, 334-35.

²⁰ *Ibid.*, 575.

Sets turn out to be subsets, categories nested within other categories; the classifying project gets out of hand.

The narrator in *The Making of Americans* faces two related problems in logical representation: how to either catalog *all* the phenomena, that is, to take account of “every one” via a list, or, how to construct, from a sample (from “a” family), categories or organizing axioms from which “every one” can be derived. But Stein’s narrator’s task—a total, systematic description of human being—turns out to be impossible, facing the prospect of infinity and the impossibility of reduction. The narrator discovers that “every one is in fragments”²¹ and that the ways in which the “rhythm of personality” unfolds in myriad and contradictory phenomena raise the impossibility of reducing a multitude to one and of producing discrete categories which could logically predict from one to every one (the “universal grouping”). She sees that there is a limit; “every” cannot exist in enumeration, and may not be able to be inferred through descriptive categories, either.

Stein reflects on the problem of “unending” description in “The Gradual Making of The Making of Americans” in this way: “as relatively few people spend their time describing anything and they stop and so in the meantime everything goes on [. . .] And so description really is unending.”²² From this lecture, Steven Meyer diagnoses Stein’s distaste for the deterministic and descriptive methods of nineteenth-century science.²³ But beyond this critique, Stein implicates the real

²¹ *Ibid.*, 519.

²² Stein, *Lectures in America*, 157.

²³ Steven Meyer, *Irresistible Dictation: Gertrude Stein and the Correlations of Writing and Science* (Stanford, CA: Stanford University Press, 2003), 3-6. For another study which aligns Stein’s philosophical investigations with the work of William James,

problem posed to scientific discourse by infinity, a key problem in the history of mathematics and particularly pressing amongst mathematical logicians at the turn of the twentieth century.²⁴ The difficulties presented by infinity to the project of reducibility particularly plagued early twentieth-century logic and scientific practice. The notion that atoms were the smallest constituents of matter (the Greek word *atomos* means “indivisible”) was superseded by the knowledge that atoms were actually conglomerates of sub-atomic particles when J. J. Thompson discovered the electron in 1897. Many models of the atom would appear in the years between Thompson’s discovery and the Bohr model in 1913, each cementing and further complicating beliefs in a fundamental basis or unit for matter, at the same time that logicians struggled to articulate forms of “logical atomism,” that is, basic units of logic or fundamental axioms undergirding all other forms of science. The “race to the bottom” in philosophy and science in the early twentieth century parallels Stein’s project in *The Making of Americans* to systematically render the “bottom nature” of being. And in all of these contexts, thinkers were discovering that accounting for phenomena at smaller and smaller levels of scale necessitated more and more complex systems of representation.

much like Meyer does, see Jonathan Levin, *The Poetics of Transition: Emerson, Pragmatism, and American Literary Modernism* (Durham: Duke University Press, 1999).

²⁴ Leo Stein reflected on the philosophical and mathematical conversations happening among their friends in Montmartre around 1905, on “infinities” and “fourth dimensions” (Leo Stein, *Appreciation: Painting, Poetry, and Prose* [Lincoln, NE: Bison Books, 1996], 175-176 and *passim*).

At the time that Stein was composing *The Making of Americans*, Bertrand Russell and Alfred North Whitehead embarked on a three-volume²⁵ collaborative project, the *Principia Mathematica*, begun around 1900 and published between 1910 and 1913. With a title loftily referencing Newton's *Philosophiæ Naturalis Principia Mathematica*, the volumes participate in a last spasm of the Victorian hope for progressive, totalizing science, that is, that all the world could be modeled via pure, universal scientific reason. The volume is a response to the turn of the century's crisis in mathematical foundations, prompted by German mathematician David Hilbert's "problems." On August 8, 1900, Hilbert presented twenty-three unsolved problems in mathematics to the International Congress of Mathematicians meeting in the Sorbonne.²⁶ Hilbert's problems were a call to others to join the project of defining mathematics logically, completing formal systems via providing consistent axioms. His second problem, and arguably the main goal of Hilbert's overall program, was a finite proof of the consistency of the axioms of arithmetic. His fourth problem concerned consistent foundations for geometry, and his sixth problem entailed mathematical treatment of the axioms of physics. Hilbert's problems would occupy (and arguably still occupy) mathematicians throughout the twentieth century.

This quest for mathematical or logical precision is held up against the storied axioms of Euclid's *Elements*. Euclid's *Elements* uses five axioms—statements or properties which cannot be proven, but are self-evidently true. An example from

²⁵ Intended to be four volumes.

²⁶ For more detail on Hilbert's problems see John Derbyshire, *Prime Obsession: Bernhard Riemann and the Greatest Unsolved Problem in Mathematics* (New York: Penguin, 2004).

Euclid is that one line can be drawn through any two points, another is that addition is commutative (you will get the same sum regardless of the order in which you add two numbers). The proofs for these axioms would be exhaustive—they are not provable ad infinitum. To complete a mathematical system one must build from axioms—these kinds of truths that need no proof, whose internal evidence makes them fundamental. In the *Principia*, Russell and Whitehead aimed to deduce the whole of mathematics from logic. By uniting logic and mathematics in a concrete system of axioms and proofs, Russell and Whitehead aimed to write a guide to the formal certainty of the universe. But these volumes bear witness, like *The Making of Americans*, to the gradual death of this hope, as they were plagued by paradoxes and superseded nearly immediately by new waves in philosophy and mathematics which better reflected the shift occurring as a result of accelerating blows to classical paradigms such as the new physics and new mathematics. At the turn of the century mathematicians like Gottlob Frege and Russell himself began discovering that the interaction of axioms in formal systems matching logic to mathematics, particularly in, but not limited to, set theory, lead to paradoxes: the logical steps from axioms to full formal theories could lead to contradictory results.

In order to axiomatize mathematics via logic, Russell and Whitehead needed to settle a number of paradoxes which impeded this aim. Central was a paradox that carried Russell's name: Russell's paradox, a 1901 rejoinder to Cantorian set theory, or naïve set theory, which he derived from Frege. In naïve set theory, any definable collection of objects is a set. The defining characteristic of a set is membership—that is, objects are members of sets because of such and such property. Most sets are not

self-membered, that is the set of all twentieth-century poets is not itself a twentieth-century poet. But Russell found that the category “set” was problematic if one considered the universal set, a necessary extension of thinking of sets in the first place. If sets can be members of sets, at the same level as objects are members of sets, a paradox arises from conceptualizing a universal set—that is, a set of all sets, and whether these sets are or are not members of themselves. To fully axiomatize logic and mathematics, there must be recourse to something outside, above—a proposition or truth independent of the system, on which a system is based. But a set of all sets cannot be said to be external in such a way as to qualify as an axiom.

The paradox is this: If the world is made up of sets, then there must be a universal set. Yet, the collection of all possible sets is itself a set: is this set contained or not contained in the universal set? The paradox follows from trying to answer this question. In logical terms: S is the set of all sets that are not members of themselves. If S is a member of itself, it is by definition *not* a member of itself, and if S is not a member of itself, it by definition *must* be a member of itself. Therefore the statement “the set of all sets that are not members of themselves contains itself” *and its negation* are true. Russell’s paradox is most easily explained by its popularized version, the “Barber Paradox.” A barber shaves every man in his village who does not shave himself. If the barber shaves himself, the statement is false. If the barber doesn’t shave himself, the statement is false. Who shaves this provincial barber is not a particularly crucial question outside, perhaps, a parlor game. Real-life people, and the everyday language they use, cannot be expected to conform to these rules. The barber does as he likes, just as Epimenedes the Cretan, the subject of the ancient

version of the “liar’s paradox,” is lying if truthful and truthful if lying when he alleges that all Cretans are liars. But when these paradoxes, easily dismissible in everyday life and language, are translated into the world of mathematics, they pose very real difficulty for set theoreticians. The concept of a “size” of an infinite set mixes everyday human conception and numeric abstraction uneasily, producing paradox and recursion at the level of a Gertrude Stein poem. Because modern mathematics seemingly depended on logic and set theory, the contradictory logic of Russell’s paradox suggested that no mathematical proof could be trusted.

In order to believe in a logical universe, or to conform mathematics to logic, Russell and Whitehead needed to resolve this and other paradoxes of self-referentiality (also called “vicious circles”), as this paradox in particular demonstrated that there was something very wrong with the entire notion of a class, crucial to any science or philosophy dependent on taxonomy. To combat various paradoxes, Russell and Whitehead propose the axiom of infinity and the axiom of reducibility. The axiom of infinity assumes that an infinite number of objects exist, and that one can speak of a conceptually limited category (a class of all numbers) even if it is infinite. This, in a not completely satisfactory way, allows Russell and Whitehead to acknowledge the infinitely complicated nature of existing objects, and yet continue to formalize classes within logic. Indeed there is something paradoxical itself about a nod to infinite complexity being the basis for simplifications, but from Russell and Whitehead’s perspective that paradox would only be semantic, not logical.

The axiom of reducibility also possesses this internal irony. That is, this axiom attempts to maintain the cogency of categories by multiplying the categories, conceptually maintaining, however, that these complications can be “reduced” back to simpler levels. The theory of types separates sets into different types of sets, with different types of members. First-order sets have only objects as members. Second-order sets have *sets* of objects as members, and so on. Assembling a system of types dictates there are different types of elements, different types of sets, different types of variables determining membership, and restrictions on what elements can be in what sets. Making statements about sets then necessitates replacing propositions with propositional functions, which are only given meaning by recourse to further context.²⁷ Separating elements into different “types” solved certain semantic problems as well: the statement of a Cretan claiming all Cretans are liars thus becomes of a different, higher-level type than the collected statements of all those liar-Cretans, interrupting the self-referential nature of the liar’s paradox. But this ad hoc “fix” to the paradoxes necessitated a much larger amount of information, a grotesque complexity (witness this is much like 900 pages of *The Making of Americans*) that mathematicians and philosophers after the publication of the *Principia* would immediately try to do away with, and which was at odds with the *Principia*’s aim to produce a more complete and elegant system.

The *Principia* and *The Making of Americans* encounter the twin problems of infinity and irreducibility, that is, the infinite number of cases (objects, humans,

²⁷ Alfred North Whitehead and Bertrand Russell, *Principia Mathematica* Vol. 1 (London: Cambridge University Press, 1910), 40. Subsequent citations to Volume One denoted “*PM*.”

types) and the difficulty of reducing them to logically consistent types or classes. This problem can also be expressed as one of intension vs. extension. Generally, intension refers to a property of an object (alternately, a description, content, or meaning) and extension the existence or iteration of an object. Intensional definition of a set generally involves a semantic description, for example A is the set whose members are the first three positive integers. Extensional definition involves listing the members of the set. In set-theoretic notation this would be: $A = \{1, 2, 3\}$. Russell and Whitehead refer to some of the philosophical problems of intension and extension in the *Principia* in this way:

It is an old dispute whether formal logic should concern itself mainly with intensions or extensions. In general, logicians whose training was mainly philosophical have decided for intensions, while those whose training was mainly mathematical have decided for extensions. The fact seems to be that, while mathematical logic requires extensions, philosophical logic refuses to supply anything except intensions. Our theory of classes recognizes and reconciles these two apparently opposite facts, by showing that an extension (which is the same as a class) is an incomplete symbol, whose use always acquires meaning through a reference to intension.²⁸

Russell and Whitehead's theory of types plunged into the extensive in order to solve problems of the intensive. That is, the axiom of reducibility, an ad hoc "fix" for the paradoxes plaguing the logical foundation of mathematics, relied on positing the existence of a multiplicity of objects to solve one central paradox about the logically

²⁸ Whitehead and Russell, *PM*, 75.

consistent existence of one object. Arguably, the paradox (the non-existence of the barber who does/doesn't shave himself) is one of intensionality, that of meaning.

Ludwig Wittgenstein, Russell's erstwhile student and colleague, would immediately critique the *Principia* and Russell's work in general in terms of the intensive—that is, his notebooks of 1914-1916 (and his 1922 *Tractatus* which would be based on those notes) would state that it was language and its meaning that caused the philosophical mistakes that plagued Russell, not logic itself. The problem that language and meaning posed for philosophy would trouble both thinkers, though Wittgenstein took it as a point of launch while Russell despaired. In fact, Wittgenstein would begin to repudiate his own attempt at “solving the problems of logic” (in the *Tractatus*) immediately after *its* publication, overhauling it in the later *Philosophical Investigations*, a study which would take on language directly. While Russell's logical atomism proposes that the world is constructed of logical atoms into systems of meaning, those complex systems of meaning continually thwarted his attempts to make logic and mathematics logically consistent, to produce a system without paradox. *The Principia* squares off against a paradox that involves an intension (property) to which no extension (object/set) can possibly correspond. Logic, however, dictates a one-one correspondence between intension and extension; objects must match meanings. As Russell says, critiquing Frege in his earlier *Principles of Mathematics*, a logical system which

proposes an intension must identify a corresponding entity: “without a single object to represent an extension, Mathematics crumbles.”²⁹

This is very like the problem of extension that faces Stein’s project in *The Making of Americans*. Moving from “each one” to “every one” via a list can never achieve full extension. Neither can the text’s aim at formal intension—a description of kind or organizing property, a foundational axiom for the “bottom nature” of being that will allow for the conceptualizing of possible extension—be fully achieved. We can understand the difficulty of *The Making of Americans*, in terms of set theory, paralleling Russell’s paradox. Let U be the “universal grouping” of “every one who ever was or is or will be living” (intension). $U = \{\text{Jesus Christ, Genghis Khan, Julius Caesar, Gertrude Stein ...}\}$ where the ellipses, in set-theoretic notation indicates an infinite set (extension). A set of all people does not necessarily introduce the self-referential paradox. The set of all people is not self-membered, as a set is not a person. Infinity (“every one who ever was or is or will be living”) is certainly problematic for a finite novel, but could be satisfied abstractly. But Stein knows her novel cannot enumerate every one who lived, is living, or will live (extension), she needs a reducing agent, a description (intension). This description is carried out through the “history” of each one, scaled up to the history of every one, to a “universal grouping.” This “grouping” is the conceptual work of set theory. This grouping is a set of sets; its membership includes sets whose conditions are things like “resisting” and “attacking,” “independent” and “dependent.” And the aim

²⁹ Bertrand Russell, *Principles of Mathematics* Vol. 1. (Cambridge: Cambridge University Press, 1903), 515. I will return to this concept in subsequent chapters, particularly Chapter Five, with Willard Van Orman Quine’s dictum: “no entity without identity.”

in *The Making of Americans* is to say something about the universal grouping, to perform a scientific act of logical description, “To be completely right, completely certain is to be in me universal in my feeling.”³⁰ Statements like these in *The Making of Americans* have been typically, and inaccurately, read as merely self-aggrandizing; instead these statements, even when ironic, demonstrate Stein’s axiomatic method, attempting the completeness and certainty of analytical logic, while also discovering the limits of this approach.³¹ Stein is increasingly drawn to the ways in which the individual thwarts her grouping imperative, as all the “wholes” of individuals reveal themselves to be incomplete, the groupings get muddled. In the same way that

³⁰ Stein, *MA*, 574.

³¹ And we should again note that Stein shows an interest in mathematics and logic from her earliest published writing. Her first novel (completed in 1903 though not published until 1950) is titled *Q.E.D.*, that is “quod erat demonstrandum,” a logical term used for the end of mathematical and philosophical proofs, signaling the completion of a proof. Stein’s use of the reference in a novel about a lesbian love triangle mixes the styles of two philosopher’s uses of “q.e.d”—Spinoza’s in the *Ethics* (perhaps the most notable use of Q.E.D. in extant philosophy) wherein the phrase acts as a closing off systematic proofs from axioms, and Descartes’s use in *Meditations*, which is somewhat like a diary, the philosophical points unfolding in narrative. In *Q.E.D.* romantic insight is likened to the sudden epiphany in a mathematical proof. In *Q.E.D.*, the narrator reflects:

“Why” she said in a tone of intense interest, “it’s like a bit of mathematics. Suddenly it does itself and you begin to see,” and then she laughed. “I’m afraid Helen wouldn’t think too much of that if it’s only seeing. However I never even thought I saw before and I really do think I begin to see. Yes it’s very strange but surely I do begin to see.”

All during the summer Adele did not lose the sense of having seen, but on the other hand her insight did not deepen. She meditated abundantly on this problem and it always ended with a childlike pride in the refrain “I did see a little, I certainly did catch a glimpse.” (Stein, *Ferhurst, Q.E.D.*, 67)

Stein may also be referencing Aristotle in one of her next works, *Three Lives*, the title of which echoes the three lives compared in Aristotle’s *Nicomachean Ethics*, where three lives are described in terms of the pursuit of happiness, politics, or philosophy.

Russell witnessing classical mathematics as “crumbling,” the individuals Stein catalogues in *The Making of Americans* become “in fragments.”³²

The early twentieth century was a uniquely turbulent moment in the effort to match meanings to objects, laws to phenomena, words to world. The publication of the *Principia* and *The Making of Americans* coincided with a general crisis in representation in the arts, sciences, and philosophy. At the advent of quantum theory, modern art and physics faced a crisis of visualization, where the classical episteme gave way to the quantum. The seemingly impossible objects and the strange behavior of sub-atomic particles and micro-phenomena caused extension and intension seemingly to part ways. Materialism—that is, the science of matter—and realism no longer corresponded in a simple way, and physicists, philosophers, and artists reevaluated the philosophical separation between the material and the image. In the face of the complexity of quantum phenomena, “single” objects no longer represented extensions—at least not in the Cartesian sense. In his 1925 introduction to the third edition of Friedrich Albert Lange’s *History of Materialism*, Russell would reflect:

Matter, for common sense, is something which persists in time and moves in space. But for modern relativity-physics this view is no longer tenable. A piece of matter has become, not a persistent thing with varying states, but a system of interrelated events. The old solidity is gone, and with it the characteristics that, to the materialist, made matter seem more real than

³² Stein, *MA*, 519.

fleeting thoughts. Nothing is permanent, nothing endures; the prejudice that the real is permanent must be abandoned³³

Despite its emphasis on consistency and reducibility, even the *Principia* shows an awareness of the irreducibly multiple inherent in any singular. Russell's "theory of judgment" (detailed in several of his other works) is included in the *Principia*, one aspect of which details the divisibility of even the most seemingly singular objects of classes. The *Principia* is careful to note that when we judge an object *as* an object, we are generally aware that the object we are marking out in our judgment is actually multiple objects in relation (we might perceive it as whole, they argue, but analytically we know it to be multiple, and when we thus judge it in a proposition it is multiple).³⁴ They write:

Owing to the plurality of the objects of a single judgment, it follows that what we call a proposition (in the sense that this is distinguished from the phrase expressing it) is not a single entity at all. That is to say, the phrase which expresses a proposition is what we call an incomplete symbol; it does not have meaning in itself, but requires some supplementation in order to acquire a complete meaning.³⁵

Again—the one is actually the many, completeness cannot occur without supplementation (in language) to form meaning, but precisely those formalizations or recourses to reference (in language) are what causes paradoxes. Russell and Whitehead attempt to boil infinity down to comprehensible units (objects, which are

³³ Bertrand Russell, *The Basic Writings of Bertrand Russell, 1903-1959* (New York: Routledge, 1992), 241.

³⁴ Whitehead and Russell, *PM*, 44-46.

³⁵ *Ibid.*, 46.

themselves sets of objects) and find that the closer one gets to the object the more infinitely that object is complex. As they have it: “Broadly speaking, a *complex* is anything which occurs in the universe and is not simple.”³⁶ Which, as the *Principia* bears out, is the only true axiom that describes everything.

The *Principia* and *The Making of Americans* are each epic volumes on classes and kinds, which attempt, through nineteenth-century modes of elaborate typologies, to either articulate or demonstrate fundamental axioms for infinite extension. But the problem of intension (that is, meaning) leads their texts into grotesque and exhausting complexity. Their texts are populated with paradoxes and limits. Though they construct the ramified theory of types and the axiom of reducibility to do away with paradoxes of self-referentiality, in order to preserve certain elements of mathematical logic, Russell and Whitehead ultimately recognize the endurance of the paradoxes by dispensing with them within pure logic. That is, they claim these paradoxes arise only when one considers “the set of all sets” a *necessary* totality, which, the paradoxes prove, cannot “logically” exist. So as they cannot logically exist, they are banished from logic. Russell and Whitehead conclude that “no significant statement can be made about” all members of a collection so, though infinity exists (axiom of infinity), we need not make statements about “all” (axiom of reducibility).³⁷ Arguably, Russell and Whitehead land on an axiom that cannot, by definition, be axiomatic. To this end, Russell and Whitehead further dispensed with paradoxes inherent in naïve set theory (and their theory of classes) by coining the term “illegitimate totalities”:

³⁶ *Ibid.*, 47.

³⁷ *Ibid.*, 39.

The principle which enables us to avoid illegitimate totalities may be stated as follows: “Whatever involves *all* of a collection must not be one of the collection”; or, conversely: “If, provided a certain collection had a total, it would have members only definable in terms of that total, then the said collection has no total.”³⁸

The *Principia* quietly witnesses the same breakdowns in totality that avant-garde modernist texts will also, not so quietly, showcase. There is something particularly *modernist* about the *Principia*'s deliberate and reactionary moves. In order to continue to make logical statements about totalities, Russell and Whitehead de-legitimize them, referring to statements about universals as “illegitimate totalities.” Yet, at the very same time, they continue to grasp for universals. For moderns, whether logicians, mathematicians, or verbal artists, attempts to formulate universals necessarily revealed their illegitimacy. Russell despairs and Whitehead moves on. Stein moves on as well, as she reflects later in her *Lectures in America*: “it was inevitable that I gradually stopped describing everything.”³⁹ She does not move on to something entirely different, however—her 1913 poem *Sacred Emily* continues to play with the paradoxes of set theory and offers an artistic representation of the self-referential paradox as its defining invention.

Stein's poem “Sacred Emily,” composed between finishing *The Making of Americans* (1911) and publishing *Tender Buttons* (1914), demonstrates her continued fidelity to the axiomatic even while acknowledging the illegitimacy of totalities. In fact, Stein's poetry after *The Making of Americans* takes as its task the

³⁸ *Ibid.*, 40.

³⁹ Stein, *Lectures in America*, 157.

representation of the excessive and illegitimate, both in form and content. The style and subject matter in her poetry, particularly from 1913 on, change significantly from that of *The Making of Americans*; she turns away from descriptive history and becomes, as Cyrena N. Pondrom writes in her introduction to *Geography and Plays*, “less concerned with the empirical quest for psychological realism and more concerned with an ontological quest to present a continuous present (a ‘pure system’).”⁴⁰ Stein’s new style of “composition” in the “continuous present” turns away from psychological descriptions of people toward philosophical composites of things (even when those things are, in fact, people). In the early portraits of 1913, Stein attempted “including everything and beginning again and again and again within a very small thing. That started me into composing anything into one thing.”⁴¹ Where *Making of Americans* was still concerned with “complete description,” “Sacred Emily” finds that “The way to say” (line 360) is “Not in description” (368) but rather in combination, juxtaposition, repetition, and deliberate, extreme experimentation with syntax and grammar.⁴² The avant-garde style of “Sacred Emily” and its sexual content are both “illegitimate” in that neither is in accordance with accepted standards, rules, or laws. As Pondrom explains:

Stein puts in all that is disruptive and *illegitimate* (in the literal and psychoanalytic senses of being outside Law and custom) about her method in service of all that is disruptive and illegitimate about her self: her assertion of

⁴⁰ Cyrena N. Pondrom, “An Introduction to the Achievement of Gertrude Stein” in *Geography and Plays* (Madison, WI: University of Wisconsin Press, 1993), xxx.

⁴¹ Quoted in *ibid.*, xxxi.

⁴² Gertrude Stein, “Sacred Emily,” in *Geography and Plays* (Madison, WI: University of Wisconsin Press, 1993), 178-188. Citations will use line numbers for ease of reference.

power to be a speaking female subject, her lesbian desire, her rejection of an economy of the same⁴³

This sense of the illegitimate emerges in the first lines of “Sacred Emily”:

Compose compose beds.

Wives of great men rest tranquil.

Come go stay philip philip.

Egg be takers.

Parts of place nuts.

Suppose twenty for cent.

It is rose in hen.

Come one day. (1-8)

Though “compose” is the repeated word in line one, Stein also interrogates the assumption that “bed” has a straightforward referent. The bed on line one is a double: the garden bed and the marriage bed. The “tranquil” wives at “rest” in bed may seem composed—that is, calm or tranquil—but the nature of such wives, this so-called tranquility of lying in the marriage bed where men “come go stay,” is itself an affect of a constructed system, the system of marriage, the bourgeois economy; as Pondrom writes, Stein “parodies the self-satisfaction of patriarchal domesticity.”⁴⁴ These customs and laws dictate marriage and coupling, and indeed reproduction. “Egg be takers” takes us down a line of substitution wherein the singular offspring of a heterosexual coupling (a great man and a wife) is supplanted by a generation of multiplicity: the egg is related to a nut, a similar item in that it has a shell, a shell that

⁴³ *Ibid.*, xlv.

⁴⁴ *Ibid.*, xlvii.

sometimes reveals more than one seed, seeds which are “twenty for a cent.” The introduction of botanical, asexual reproduction alongside bourgeois human reproduction transforms into the possibility of queer reproduction. In contrast to the dismissive bird-call of the sexual male (“philip philip”) we have the generative possibilities of two forms of the female, “rose in hen,” who may “come one day” to produce something through their union. And in fact it is through the productive (even reproductive) labor of Stein’s life and work, represented in the many “eggs,” “seeds,” and “nuts” of the poem, that she produces forms of illegitimate flowering: the lilies and petunias of the poem are grown outside of the traditional laws of marriage, and outside the standard laws of logical representation. They are “Weeds without papers” (36). Nevertheless (and Stein repeats the logical connective “nevertheless” throughout the poem, reminding us that even in logical rhetoric when we produce statements with defined meaning we are continually adding to and contradicting them), these “weeds without papers are necessary” (37). The most powerful weed produced in Stein’s marriage of logic and illogic in “Sacred Emily” is her axiomatic statement “Rose is a rose is a rose is a rose” (318). And this statement is “Loveliness extreme” (319) precisely *because* it is “Excessively illegitimate” (335).

The tautology “Rose is a rose is a rose is a rose” is one of the most famous lines in literature, and arguably the most famous revision of one of the fundamental axiomatic rules for rational discourse, one of the three “Laws of Thought”: the Law of Identity, *A is A*. As an updated rendering of the Law of Identity, the line reaches back to Plato’s *Thaetetus* dialogue and Aristotle’s *Metaphysics*: in other words, “the

fact that a thing is itself." Presumably this leads us not only to a theory of substance but a first principle for symbolic language. But adding a third and fourth iteration to this claim complicates things, moving Stein away from Plato and Aristotle and into new territory. The line has certainly been employed in the context of a first principle of identity by many. Take, for example, an article in the June 21, 1947 edition of *The Science News-Letter*, where botanist Frank Thone tells us:

There is no sure way of distinguishing between mushrooms and toadstools, simply because there is no distinction between them. Mushrooms are toadstools and toadstools are mushrooms. Both names are words descriptive of a plant of a certain shape. Any fleshy fungus with a cap and a stalk is a mushroom. It is also a toadstool. [. . .] To parody Gertrude Stein just once more: a mushroom is a toadstool is a mushroom.⁴⁵

In other words, the fact of the matter is the object $A = \text{toadstool}$, $A = \text{mushroom}$, and thus if A is A , toadstool is mushroom. Thone parodies Gertrude Stein "just once more" not because he himself repeats the practice within his short "Nature Ramblings" column, but because iterations of her famous "Rose is a rose is a rose is a rose" were abundant in every discipline and nearly every rhetorical situation, and were already a rampant cliché in 1947. Since the publication of *Geography and Plays* (1922) the influence of the line increased exponentially: not only as a metonymic stand-in for Stein's methods, but as a universal emblem of the new poetry. Harshly parodied or reverently channeled by Stein's modernist compatriots, the line has impressed itself upon droves of writers after her, running through commercial

⁴⁵ Frank Thone, "Mushrooms are Toadstools," *The Science News-Letter* 51.25 (21 June, 1947): 398.

advertisements and cocktail conversations, improbably finding its way into both a 1980s American public service announcement about responsible drinking—dislocating the casual beer from its position as alcohol’s lesser evil with “a drink is a drink is a drink”—and the 1999 season of *Law and Order: Special Victim’s Unit*, in which a detective quips, gravely, “a rape is a rape is a rape.”⁴⁶ The line has appealed to scientific contexts as much as artistic ones. *Science News* opened their 1969 profile of the Nobel Prize winners in Chemistry and Physics with an allusion to Stein: “To non-chemists, just as a rose is a rose, butane is butane and glucose is glucose.”⁴⁷ In a survey of literary allusions in bio-medical titles from 1951-2005, researcher Neville W. Goodman finds 28 allusions specifically to the “rose” in Stein’s iconic phrase, including “A Rose is a Rose is a Rose, But What Exactly is a Gastric Adenocarcinoma?” from the *Journal of Surgical Oncology*.⁴⁸

Like many commonplaces with an artistic flourish, the circular phrase has been invested with nearly any meaning. It is used to invoke Stein’s credibility as a genius and to denounce her as “rambling.” As Robert Fleissner puts it, “there are as many meanings as there are roses.”⁴⁹ Fleissner’s analysis fixes on four meanings to match the four roses in Stein’s line, but because of the popular response to it, we might say there are as many meanings as there are contexts in which the phrase has

⁴⁶ “Misleader,” *Law and Order: Special Victims Unit*, Season 1, Episode 17, NBC (31 March, 2000).

⁴⁷ “Nobel Prizes in...Chemistry, Physics,” *Science News* 96.19 (8 November, 1969): 421.

⁴⁸ Neville W. Goodman, “From Shakespeare to Star Trek and Beyond: A Medline Search for Literary and Other Illusions in Biomedical Titles,” *BMJ: British Medical Journal* 331.7531 (December, 2005): 1541.

⁴⁹ Robert F. Fleissner, “Stein’s Four Roses,” *Journal of Modern Literature* 6. 2 (April, 1977): 327.

been repeated. John Malcolm Brinnin opens his lengthy treatise on Stein and her world, *The Third Rose*, with a quip from his friend Erv Harmon, a burlesque comic: “I can go along with those first two roses of hers all right...but when she gets to that third rose she loses me.”⁵⁰ Brinnin continues,

“A rose is a rose” does not seriously disturb the equilibrium of most people and, like ‘business is business,’ may even strike some people as simple good sense made clear and final. But for considerations that must include the indeterminate reaches of semantics and metaphysics, ‘Rose is a rose is a rose is a rose’ opens up a literary avenue upon which few people have the temerity or the desire to step.⁵¹

So says Brinnin in the opening pages of his 1959 book, though before and after him, *many* found the temerity and the desire, whether to embrace or dismiss those “indeterminate reaches” implied in the third and fourth iterations of rose. Professor of Philosophy Peter Carmichael uses Stein when writing on the concept of rhetorical truth, as he shifts from the example “Snow is white” to “‘Snow is white’ is true.” To say “‘Snow is white’ is true,” argues Carmichael, “says no more than ‘Snow *is* white,’ even rhetorically.”⁵² Further,

we could say “‘Snow is white’ is true’ is true” and so on, ‘truing’ it as far as we pleased, and still that would add nothing, except verbiage, like ‘A rose is a

⁵⁰ John Malcolm Brinnin, *The Third Rose: Gertrude Stein and Her World* (New York: Little, Brown, and Co., 1959), xiii.

⁵¹ *Ibid.*

⁵² Peter A. Carmichael, “The Rhetorical Conception of Truth,” *Philosophy and Phenomenological Research* 27.1 (September, 1966): 105.

rose is a rose...' (though not like "A rose is a rose' is a rose," which would be false since 'A rose is a rose' is not a rose, but a sentence).⁵³

Carmichael's un-attributed reference to Stein, though it implies the line contains merely excess—"nothing except verbiage"—at least in its relation to truth, is telling. Stein's statement seems to naturally belong to the history of the relation between truth and language, and is placed within such discussions even when discounted. It also speaks to the power of Stein's words in the popular imagination, whether in a newspaper headline, a joke, or here, in a journal published by the *International Phenomenological Society*.

Most literary critics, for example, would argue Stein's meaning is in direct opposition to the finality and sense implied in *A is A*. "Rose is a rose is a rose is a rose" is more often taken by artists or scholars of the humanities to express the principles of linguistic indeterminacy, of Derridean deferral, anticipating the linguistic experiments of later postmodern poets. The phrase has been alternately taken up as emblematic of the search for self-identity (remember that the first use of the phrase uses the capital "Rose" to start off the sequence, which has been taken to imply a woman identifying herself in and through language),⁵⁴ as referencing the linguistic construction of the universe (a rose *is* only what the word rose is), a pun

⁵³ *Ibid.*

⁵⁴ On questions of identity, see: Peter Schwenger, "Gertrude Writing Rose Writing Rose," *Children's Literature Association Quarterly* 19.3 (Fall 1994): 118-121.

about desire in language (eros is eros is eros),⁵⁵ or a poetic statement of the very function of reference itself.

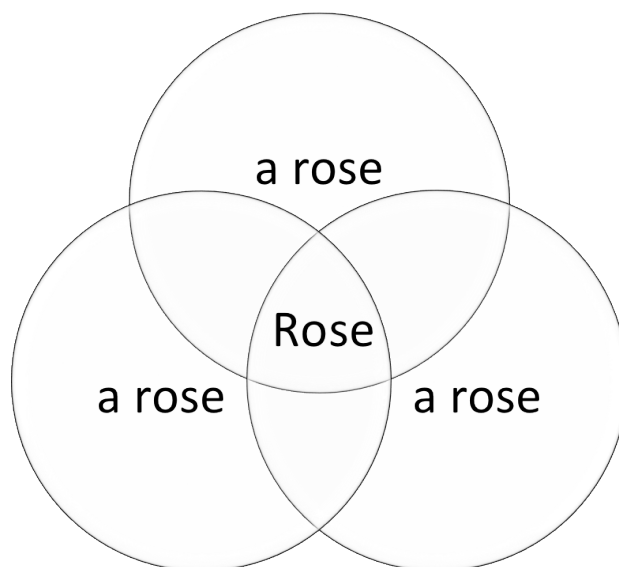
For others, including those wielding it in popular news headlines, commercials and sitcoms, the line is a call not to split hairs. For many, this is in fact both the most meaningful take on the famous line, and yet the outcome is the most meaningless—again, “Rose is a rose is a rose is a rose,” for them, means “it is what it is,” an idiomatic, cynical accommodation which is itself a version of the law of identity (*A is A*). Indeed, whether invested with the profound or the mundane, the generic resemblance between Stein’s most famous line and the language of analytical logic is strong. The sequence on its own is a simple, declarative proposition. In another variation—“Do we suppose that all she knows is that a rose is a rose is a rose is a rose” (*Operas and Plays*)⁵⁶—it acts as a first-principle, though it is undercut by the various forms of contingent knowledge (ours, hers) in the line. Variations of “Rose is a rose is a rose is a rose” became Stein’s personal emblem, gracing stationery, plates, and other baubles in the Stein-Toklas household, and, as literary allusion, has threaded itself through nearly every segment of culture from Stein’s time into our own. That this phrase exemplifies, depending on popular usages, both a moment of Stein’s logic and illogic, demonstrates in miniature the paradoxes of Stein’s writing and place in cultural history, which we will return to in Chapter Five.

⁵⁵ On “eros” see: Pondrom’s introduction to *Geography and Plays*, xlv; and also Charles Carmello, “Reading Gertrude Stein Reading Henry James, or Eros is Eros is Eros is Eros,” *The Henry James Review* 6.3 (Spring 1985): 182-203.

⁵⁶ Gertrude Stein, *Operas and Plays* [1932] (Barrytown, NY: Barrytown/Station Hill Press, Inc., 1998), 110.

It is the rampant application of a statement so particular and strange that makes the line an artifact of axiomatic modernism: the line axiomatically demonstrates what we understand to be the formal excesses of modernism, and as an axiom for Stein's method it demonstrates the topological transformations of her poetics, and her deep commitment to rendering the real outside of the standard descriptive mode. The problem of "Sacred Emily" is putting life into words, or as Stein said, to "Put something down some day in my hand writing" (258) like the seeds in the garden bed. Composing in words and sewing seeds are explicitly linked in the poem, as Stein puns on "so"/"sew" in order to imply "sow": "So great so great Emily. / Sew grate sew grate Emily" (141-42). But how can the real be composed in language, in those "Thoroughly needed signs" (301) and the "Cunning saxon symbol" (306)? Even in a seemingly irrational idiom, Stein is attempting to do so logically, as the poem repeats in lines 152 and 153: "Begging to state begging to state begging to state alright." "Sacred Emily" plays with the cardinal concepts of logic, such as identity and membership, in a subversive and feminine idiom. The 370-line poem plays with sets and groupings, and in such a way it continues the project of *The Making of Americans*, but it more directly exposes the paradoxes at the heart of naïve forms of typologizing logic, which will be a central concern of her next major work, *Tender Buttons* (1914). "Rose is a rose is a rose is a rose," as an axiomatic statement that "Sacred Emily" "begs" to make, provides a bridge between (and *not* a break between) the typology of naïve set theory and the new mathematics presented in topology, a subject we will return to in detail in Chapter Two.

As a revision of A is A from two to four (or more) elements, Stein introduces a theory of identity not founded on the notion of a self-consistent individual object, A , but on a set-theoretic definition, where an object is always already a set of elements. Let “Rose” be A where, extensionally, $A = \{\text{a rose, a rose, a rose}\}$. The equivalence between each of the iterations of “a rose,” however, causes each object to reach both forward and backward to define its identity, which is then necessarily plural, making each rose actually itself a set (of things that are A). We can define “Rose” then as a member of each set of “a rose.” It might be helpful to visualize this in another idiom of basic analytical logic, the Venn Diagram, introduced by English mathematician John Venn in 1881 and commonly employed when representing membership in multiple sets. Stein’s line rendered as a Venn Diagram would be:



Each rose is defined by, and thus belonging to, all the other roses, and yet, at the same time, also contains all the other roses. Intensionally, $A = A$ is now $A = \{x : x \text{ is things that are } A\}$, a logical recursion. The set necessarily contains itself.

In defining each rose through a succession of other roses (each a repetition with a difference), Stein collapses intension and extension: where meaning is identical to a list, rose is defined through an enumeration in essentially no new terms. And it is in this way that Stein uses intension to *create* extension, excesses of linguistic meaning to make an object present:

Now you have all seen hundreds of poems about roses and you know in your bones that the rose is not there. All those songs that sopranos sing as encores about “I have a garden; oh what a garden!” Now I don’t want to put too much emphasis on that line, because it’s just one line in a longer poem. But I notice that you all know it; you make fun of it, but you know it. Now listen! I’m no fool. I know that in daily life we don’t go around saying “is a . . . is a . . . is a . . .” Yes, I’m no fool; but I think that in that line the rose is red for the first time in English poetry for a hundred years⁵⁷

The rose becomes “there,” present, and red for the first time in a hundred years, through Stein’s excessively illegitimate logic. Recall that explication of the infinite is the *raison d’être* of set theory; it attempts to provide a method to generate consistent truths about objects that extend infinitely. Set theory arguably began with trying to think the *being* of numbers—numbers as more than signs that linguistically describe material objects but as objects in their own right. Mathematicians and logicians are all over the map regarding the ontology of

⁵⁷ Stein quoted in Thornton Wilder, “Introduction,” *Four in America* (New Haven: Yale University Press, 1947), vi.

mathematical objects.⁵⁸ But many of the logicians at work in a set-theoretic vein in the early twentieth century, such as Russell and Frege, were committed, at least in some of their work, to the *being* of numbers, the existence of extensions, the ontology of mathematical objects. And therein lies the thrilling, modernist, and perhaps impossible nature of set theory's gesture toward logical ontology: locating *being* within a highly abstract formal system born out in linguistic statements. "Rose is a rose is a rose is a rose" belongs to this history. For Stein, the line gives color, presence, being to the rose. As she writes in *Lectures in America*:

When I said.

A rose is a rose is a rose is a rose.

And then later made that into a ring I made poetry and what did I do I

caressed completely caressed and addressed a noun.⁵⁹

In addressing and caressing this noun "completely," Stein imagines the ability to make a concept present, complete, and tangible. Literary critics have noted the

⁵⁸ The ontology of mathematical objects has a long and rich philosophical bibliography. One major example in the philosophy of mathematics is the Quine-Putnam indispensability argument for mathematical realism. I will return to Quine's thoughts on ontology in Chapter Five. For the indispensability argument, see particularly W.V. Quine, *Theories and Things* (Cambridge: Harvard University Press, 1981) and Hilary Putnam, *Mathematics Matter and Method: Philosophical Papers Vol. 1*. (Cambridge: Cambridge University Press, 1979, particularly 323-357). This reasoning holds that the seeming "indispensability" of mathematics for physical and empirical science follows that mathematical entities should be given the same ontological status as the physical objects they are often thought of to simply "describe." From Quine and Putnam's positions, because sets, numbers, functions, geometrical objects, etc. are such fitting and necessary references for scientific theories, these mathematical entities should be given the same ontological license as the natural objects those theories apply to. It is, in Putnam's terms, "intellectual dishonesty" to relegate mathematical entities to a realm of non-existent abstraction if we grant physical status to theoretical objects (such as the electron prior to 1920, or the gene prior to 1952) (Putnam 347).

⁵⁹ Stein, *Lectures in America*, 231.

materiality of Stein's use of language in her emphasis on the sound of words and the shape of text. As Rebecca Scherr writes, Stein's "language does not merely represent or even mediate reality; it is also substantive: language is an entity one can hold, feel, mold, move, encounter."⁶⁰ While "Rose is a rose is a rose is a rose" certainly puns on sound (arose, eros) and shape (a straight line implying a circle), it is not a particularly arresting example of Stein's sonic experimentation, nor does it participate in the form of concrete poetry otherwise displayed in "Sacred Emily." The line grants the word entity in a different way, in a logical, mathematical, and philosophical way—through deployment of the metaphysics of infinity, as the infinite may be only made real through the abstract.

Like the most insidious paradoxes of *The Principia Mathematica*, Stein's novel set is both infinite and recursive. The deliberate self-referentiality of Stein's axiom for identity in "Sacred Emily" presents a productive, irreverent, and equally compelling alternative to the ultimate cultural reference for self-referential puzzles: Russell's paradox. Russell's paradox, the "Barber Paradox," imagines a barber who by definition shaves every man in the village who does not shave himself, and thus by shaving himself both is and isn't himself, exposing the way in which identity is and isn't consistent with itself inside this logical system. In a probably incidental and yet serendipitous choice of words, the garden bed of "Sacred Emily" buries the barber:

Next to barber.

⁶⁰ Rebecca Scherr, "Tactile Erotics: Gertrude Stein and the Aesthetics of Touch," *Lit: Literature Interpretation Theory* 18.3 (2007): 194.

Next to barber bury.

Next to barber bury china.

Next to barber bury china glass.

Next to barber china and glass.

Next to barber and china.

Next to barber and hurry.

Next to hurry.

Next to hurry and glass and china.

Next to hurry and glass and hurry.

Next to hurry and hurry.

Next to hurry and hurry.

Plain cases for see.

Tickle tickle tickle you for education. (99-112)

The Principia Mathematica attempts to bury the barber by banishing him from logic. Stein's poem, on the other hand, does not bury the dead, but buries a seed. The "barber" being buried in this passage is an illegitimate "seed" of transgressive, queer coupling. The barber passage of "Sacred Emily" is incredibly erotic; the reader is brought along on the waves of pleasure created by the undulating length of the lines and the building pleasure of the repetition (and the injunction to "hurry").⁶¹ This sexual encounter is queer, but it is also productive. We're "tickled" for "education," as the passage comes to a climax in something edifying: "Plain cases for to see." The heterosexual couplings of *The Making of*

⁶¹ Pondrom also notes that these lines follow "the rhythms of arousal" ("Introduction," *Geography and Plays*, xlvi).

Americans, like the wives of great men, do not adequately produce a theory of identity for Stein that is “like the earth complete and fructifying.”⁶² The bed of “Sacred Emily,” is better able to model this world, not in the sense of being complete, but in a new sense of the speculative “whole” provided by set theory—extending to the infinite, continually fructifying and becoming.

For Russell, the new mathematics promised a return to the certainty of Greek geometry. The logical foundation to mathematics would “achieve, within our generation, such results as will place our time, in this respect, on a level with the greatest age of Greece.”⁶³ For Hilbert, Cantorian set theory was a “paradise” from which we could not be expelled. Though Hilbert’s famous claim has been widely criticized as naïve, imagining a return to an axiomatic Eden without acknowledging its tangled roots of logical paradox, its larger context actually resembles Stein’s garden much more than Adam and Eve’s:

We shall carefully investigate those ways of forming notions and those modes of inference that are fruitful; we shall nurse them, support them, and make them usable, whenever there is the slightest promise of success. No one shall be able to drive us from the paradise that Cantor created for us.⁶⁴

Stein’s garden is postlapsarian—it is not a return. Nevertheless, her carefully investigated forms of linguistic control do give slight promises of success. She takes on the arbitrary nature of the sign and plants it, nurses it, *makes it usable*. The

⁶² Stein, *MA*, 574.

⁶³ Bertrand Russell, “Mathematics and Metaphysicians,” [1901] *Mysticism and Logic, and Other Essays* (London: Longmans, Green, and Co., 1919), 96.

⁶⁴ Hilbert quoted in Jean Van Heijenoort, *From Frege to Godel: A Sourcebook in Mathematical Logic, 1879-1931* (Cambridge, MA: Harvard University Press, 1967), 375-76.

product of Stein's bed of composition, her iterative rose, offers a fundamental axiom for linguistic representation that is an indirect rejoinder to Russell's paradox. Stein's line presents a circle both complete and not complete: an ouroboros. It's a logical tautology with deliberate self-reference. The rose bed is a place to "bury" the barber paradox, but not so as to banish it: rather to plant it, to let the self-referential paradox flower and bloom.

In the early twentieth century, the equations of physics exploded singularities. Logic when applied to itself was found to produce paradox. Attempts to model the world in any finite way necessarily encountered impossibility or escalated into infinity. Stein's foundational axiom for identity and representation embraces these paradoxes. As Stein writes in *As Fine as Melanctha* (1922): "A continued story. Civilization begins with a rose. A rose is a rose is a rose is a rose. It continues with blooming and it fastens clearly upon excellent examples."⁶⁵ In other words, we may talk about illegitimate totalities (that is "fasten clearly upon excellent examples," or, as in "Sacred Emily," "plain cases for to see") at the same time that we recognize that the circle will not fully close, that our systems will tend toward infinity, propelled by the continuation of "blooming" and becoming.

⁶⁵ Gertrude Stein, "As Fine as Melanctha," in *As Fine as Melanctha (1914-1930): Volume Four of the Yale Edition of the Unpublished Writings of Gertrude Stein*, ed. Carl Van Vechten (New Haven: Yale University Press, 1954), 262.

Part I: Gertrude Stein and Early Twentieth-Century Logics

CHAPTER TWO

Impossible Objects: Stein's Topological Modernism

Axiomatic modernism takes varied forms, but its most common manifestation is in a commitment—professed or executed—to precision, clarity, and purity in language, marked by a particularly austere, undecorated style and precise, exacting word choice, even if to a casual observer, particularly a reader of Gertrude Stein, this seems counterintuitive. This imperative to produce simple, unadorned, and direct forms of expression is most recognizable in the injunctions of Ezra Pound—“use no superfluous word” or “use either no ornament or good ornament,” for example—which will be the subject of Chapter Three. Stein's maxim, cited regularly in critical and biographical scholarship, that she wanted to make her linguistic representations as “exact as mathematics”¹ belongs to this set. Indeed, Stein is known for her advocacy for, and use of, plain language, though she is equally (if not more) noted for alleged linguistic excesses. This is one of the troublesome paradoxes of axiomatic modernism, particularly evident in the case of Stein, where there is a stated ethic of simplicity on the part of the writer, but an extreme level of interpretive difficulty on the part of the reader.

In his 1921 essay, “The Metaphysical Poets,” T. S. Eliot writes of the resolution of certain seventeenth-century poets to use simple and “pure” language, particularly George Herbert, in whose verse “this simplicity is carried as far as it can

¹ Gertrude Stein, “How Writing is Written,” in *How Writing is Written: Volume II of the Previously Uncollected Writings of Gertrude Stein*, ed. Robert Bartlett Haas (Los Angeles: Black Sparrow Press, 1974), 157.

go—a simplicity emulated without success by numerous modern poets.”² Though Eliot claims that the aim of some modern poets toward extreme simplicity is not successful, he draws an apt comparison between his set of “metaphysical poets” and modernism more generally when he writes that “The *structure* of the sentences, on the other hand, is sometimes far from simple, but this is not a vice; it is a fidelity to thought and feeling.”³ It is easy to recognize this fidelity to “thought and feeling” in the mimetic ethic of modernist fiction, for example stream of consciousness narration or other forms of narrative complexity. Our most common examples of modernist fiction recognize that the universal is best approached through the particular; what comes along with it, say in the work of Virginia Woolf or James Joyce, is the intensive complexity of individual experience that we must navigate in order to make claims about anything transcendent. Stein’s *The Making of Americans* fits under this rubric, when it produces an exhaustive inventory of the “rhythm of personality” in order to approach the “universal grouping” of human experience.

Modernist poetry is, however, often labeled an abstract and anti-mimetic project with little “fidelity” to reality. Critical assessments of literary modernism have carelessly overemphasized the “rejection” of metanarratives and absolutes, neglecting the ways in which modernist figures attempted to approach the universal, albeit through different methods which recognized the need for more thoughtful and potentially contingent axioms than those of the previous age.

Literary modernism is characterized by both a questioning of the legitimacy of the

² T. S. Eliot, “The Metaphysical Poets,” in *Selected Essays 1917-1932* (New York: Harcourt Brace and Company, Inc., 1932), 245.

³ *Ibid.*

universal, and a stalwart aim at finding it (not just expressing it) in art. Looking at forms of the axiomatic in literary modernism, I want to demonstrate how Stein and others' attempts at precise, verifiable, and accurate poetics parallels the quest in the new mathematics to produce abstract formal systems that *work*, and that correspond to the everyday world, even if one can no longer have unerring faith in a Platonic realm of consistent mathematical forms outside of space, time, and human construction.

Eliot anticipates these assessments of modernist poetry later on in his essay, when he speaks of the necessary "difficulty" of poetry, even poetry aimed at simple, unadorned language and a fidelity to higher truth. In discussing this difficulty he more explicitly addresses the poetry of his current moment:

We can only say that it appears likely that poets in our civilization, as it exists at present, must be *difficult*. Our civilization comprehends great variety and complexity, and this variety and complexity, playing upon a refined sensibility, must produce various and complex results. The poet must become more and more comprehensive, more allusive, more indirect, in order to force, to dislocate, if necessary, language into his meaning⁴

In this way, matching language to meaning follows a dialectical string, incorporating the opposing forces of becoming "more comprehensive" while being "more indirect," forcefully assimilating while at the same time dislocating language.

The *Principia* encountered this paradox inherent in modeling complexity: starting with the purpose of refinement, Whitehead and Russell banished the

⁴ *Ibid.*, 248.

subtleties of language as best they could. They reasoned that if they primarily used symbols, perhaps they could make logic and mathematics consistent, avoiding the ambiguity of natural language. The *Principia* attempted to control language through extraordinarily strict rules, seeking purer expression through rigid formalism. But logic depends on expression—the conversion of statements about the world into formulas and equations in order to determine their truth-value, and the *Principia* ended up taking the “more comprehensive” road toward modeling complexity. In refining the axioms of mathematical logic, Whitehead and Russell found their definitions needed more information, greater context, and a surplus of qualification.

Eliot’s claim about complexity is based in “civilization, at present.” But it must be said that the perceived lack of “realism” in modernist poetry like Stein’s *Tender Buttons*, the subject of this chapter, or the difficulty presented to readers in Pound’s *Cantos*, the subject of Chapter Four, is not *merely* a reflection of the complexity of twentieth-century experience. Certainly the rapidly industrializing and globalizing century impressed itself on those with a “refined sensibility” as Eliot has it. Though Eliot gives the civilization “at present” distinction, my study is about the recognition, particularly in twentieth-century mathematics and poetics, that complexity was not born with the twentieth-century war machine, global communications systems, or international economic structures, but that complexity is emerging from centuries-old forms that had been thought simple equations, complete systems, consistent mechanics, and foundational axioms. The task, then, for the new mathematics and the new poetry, was neither to banish paradoxes nor to reject absolutes, but to produce new and better axioms, more flexible and

accurate systems, to better bring language—whether the language of logic, mathematics, or aesthetics—and meaning together, but in ways that are not logically naïve.

The previous chapter ended on Stein’s revision of one of these age-old forms: the law of identity, A is A , in “Rose is a rose is a rose is a rose.” Aristotle’s three classical laws of thought—the law of identity, the law of non-contradiction, and the law of the excluded middle, were crucial to the propositional logic of Russell and Whitehead’s *Principia Mathematica*. These laws determine the logical nature of the universe. The law of non-contradiction states that contradictory statements cannot each be true about a given object at the same time (A is A and A is not A cannot both apply). The law of the excluded middle, a complement to the law of non-contradiction, follows that one statement *must* be true, i.e., logically, any statement that is not true, must be false. There is nothing in-between true and false. And there is no third position of neither true nor false, (or, both true *and* false, as the law of non-contradiction states). But self-referentiality, a statement’s use of itself to prove a statement about itself, explodes this proposition, producing paradox, just as Schroedinger’s explanation of the atom as both particle and wave offers an apparent paradox. “This statement is false” cannot be true by its own definition, and yet, by not being true, it is true, by its own definition. If it is false, it is true; if true, it is false.

The excluded middle is precisely what is embraced in “Rose is a rose is a rose is a rose” as a revision of the fundamental axiom of identity. While the law of the excluded middle does not permit a third position, Stein inhabits the middles of being in her string of is...is...is, adding a third *and* a fourth position, and implying more.

Of course, self-referentiality in poetry is not limited to Stein's work, nor is it particularly radical. Rather, it is one of the defining features of the poetic. In *Radiant Textuality*, Jerome McGann highlights the way poetry will always undercut *A is A*:

The problem is that poetical works, insofar as they *are* poetical, are not expository or informational. Because works of imagination are built as complex nets of repetition and variation, they are rich in what informational models of textuality label 'noise.' No poem can exist without systems of 'overlapping structure,' and the more developed the poetical text, the more complex are those systems of recursion. So it is that in a poetic field no unit can be assumed to be self-identical. The logic of the poem is only frameable in some kind of paradoxical articulation such as: 'a equals a if and only if a does not equal a.'⁵

McGann's "paradoxical articulation" is an unattributed re-writing of the Barber Paradox: let S be the set of all sets that are not members of themselves ($S = \{x : x \notin x\}$), then S is a member of itself if and only if S is not a member of itself ($S \in S$ iff $S \notin S$). Similarly, each of Stein's roses presents us with the necessary difference used to define each other rose, so to a classical axiom of identity, each is and isn't identical with itself. Again this is not radical for poetry, necessarily, but it *is* such in analytical logic or in a discourse that aims for consistency and determinable truth. We must remember that Stein is an axiomatic modernist, and aims for consistency and truth in her mimetic project. Stein's theory of identity is arresting because while it is a poetic line, it is written in the discourse of logic, aimed at our most fundamental

⁵ Jerome McGann, *Radiant Textuality: Literature after the World Wide Web* (New York: Palgrave, 2001), 175.

axioms about the relation of knowledge to reality. Despite what we might say about the inherently paradoxical nature of the poetic, Stein was adamant that her aim in her poetry of this period was to make it as “exact as mathematics.”

In “How Writing is Written” (1935), Stein describes her attempt to axiomatize the poetic, to avoid an oversupply of meaning by taking language down to a primitive form, in this way:

While I was writing I didn't want, when I used one word, to make it carry with it too many associations. I wanted as far as possible to make it exact, as exact as mathematics; that is to say, for example, if one and one make two, I wanted to get words to have as much exactness as that. When I put them down they were to have this quality. The whole history of my work, from *The Making of Americans*, has been a history of that. I made a great many discoveries but the thing that I was always trying to do was this thing.⁶

We generally take $1 + 1 = 2$ on unshakable faith, a foundational axiom for the utility of mathematics, and indeed for the correspondence of mathematics as a formal system to the real world of objects. I have one apple. You give me one apple. I now have two apples. Such would be a fitting example for what Stein might mean by “exact as mathematics.” But if we read Stein's qualification of “as far as possible” as an admission of the limits of poetic accuracy, only, held up against unyielding mathematical precision, we ignore the logical construction of Stein's statement. “As far as possible” may indeed acknowledge the limits of any formal system aimed at exactitude, that is not linguistics or poetry alone. We should note Stein's “if/then”

⁶ Stein, “How Writing is Written,” 157.

construction: “if one and one make two,” then she wants words to have “as much exactness as that,” that is, the currently only *proposed* exactness of $1 + 1 = 2$. She acknowledges here that one and one making two is not the pinnacle of exactitude, but an “example” of conditional exactitude.

And why not, if in the earlier part of her century, Russell and Whitehead’s magnum opus struggled laboriously to reach precisely that axiom of precision. The *Principia Mathematica* is in fact famous, or infamous, for taking hundreds of pages to prove that $1 + 1 = 2$. The passage of note appears some 350-400 pages into volume one, depending on your edition:

362 PROLEGOMENA TO CARDINAL ARITHMETIC [PART II]

***54·42.** $\vdash :: \alpha \in 2 . \supset : \beta \subset \alpha . \mathfrak{A} ! \beta . \beta \neq \alpha . \equiv . \beta \in \iota' \alpha$

Dem.

$\vdash . *54·4 . \supset \vdash :: \alpha = \iota' x \cup \iota' y . \supset :$

$\beta \subset \alpha . \mathfrak{A} ! \beta . \equiv : \beta = \Lambda . \vee . \beta = \iota' x . \vee . \beta = \iota' y . \vee . \beta = \alpha : \mathfrak{A} ! \beta :$

[*24·53·56.*51·161] $\equiv : \beta = \iota' x . \vee . \beta = \iota' y . \vee . \beta = \alpha$ (1)

$\vdash . *54·25 . \text{Transp} . *52·22 . \supset \vdash : x \neq y . \supset . \iota' x \cup \iota' y \neq \iota' x . \iota' x \cup \iota' y \neq \iota' y :$

[*13·12] $\supset \vdash : \alpha = \iota' x \cup \iota' y . x \neq y . \supset . \alpha \neq \iota' x . \alpha \neq \iota' y$ (2)

$\vdash . (1) . (2) . \supset \vdash :: \alpha = \iota' x \cup \iota' y . x \neq y . \supset :$

$\beta \subset \alpha . \mathfrak{A} ! \beta . \beta \neq \alpha . \equiv : \beta = \iota' x . \vee . \beta = \iota' y :$

[*51·235] $\equiv : (\mathfrak{A} z) . z \in \alpha . \beta = \iota' z :$

[*37·6] $\equiv : \beta \in \iota' \alpha$ (3)

$\vdash . (3) . *11·11·35 . *54·101 . \supset \vdash . \text{Prop}$

***54·43.** $\vdash :: \alpha , \beta \in 1 . \supset : \alpha \cap \beta = \Lambda . \equiv . \alpha \cup \beta \in 2$

Dem.

$\vdash . *54·26 . \supset \vdash : \alpha = \iota' x . \beta = \iota' y . \supset : \alpha \cup \beta \in 2 . \equiv . x \neq y .$

[*51·231] $\equiv . \iota' x \cap \iota' y = \Lambda .$

[*13·12] $\equiv . \alpha \cap \beta = \Lambda$ (1)

$\vdash . (1) . *11·11·35 . \supset$

$\vdash : (\mathfrak{A} x , y) . \alpha = \iota' x . \beta = \iota' y . \supset : \alpha \cup \beta \in 2 . \equiv . \alpha \cap \beta = \Lambda$ (2)

$\vdash . (2) . *11·54 . *52·1 . \supset \vdash . \text{Prop}$

From this proposition it will follow, when arithmetical addition has been defined, that $1 + 1 = 2$.

Fig. 1: Page 362 of *Principia Mathematica*, Vol. 1 (1910)⁷

⁷ Whitehead and Russell, *PM*, 362.

This passage ends with “From this proposition it will follow, when arithmetical addition has been defined, that $1 + 1 = 2$.”⁸ That is, because Russell and Whitehead set out to formalize all logic in order to provide the base for mathematics, they needed to define every term and operation needed to even speak the equation $1 + 1 = 2$. At this point in volume one, Russell and Whitehead have only established enough of their logical system to suggest $1 + 1 = 2$, and to make it possible to *begin* to talk about the actual proof of the equation, which still depends on their defining addition in their axiomatic scheme. The final proof of $1 + 1 = 2$ does not come until eighty plus pages into volume two of the *Principia*:

$$\begin{aligned}
 & *110\cdot632. \vdash : \mu \in NC . \supset . \mu +_o 1 = \hat{\xi} \{ (\forall y) . y \in \xi . \xi - \iota' y \in sm'' \mu \} \\
 & \quad Dem. \\
 & \quad \vdash . *110\cdot631 . *51\cdot211\cdot22 . \supset \\
 & \quad \vdash : Hp . \supset . \mu +_o 1 = \hat{\xi} \{ (\forall \gamma . y) . \gamma \in sm'' \mu . y \in \xi . \gamma = \xi - \iota' y \} \\
 & \quad [*13\cdot195] \quad = \hat{\xi} \{ (\forall y) . y \in \xi . \xi - \iota' y \in sm'' \mu \} : \supset \vdash . Prop \\
 & *110\cdot64. \vdash . 0 +_o 0 = 0 \quad [*110\cdot62] \\
 & *110\cdot641. \vdash . 1 +_o 0 = 0 +_o 1 = 1 \quad [*110\cdot51\cdot61 . *101\cdot2] \\
 & *110\cdot642. \vdash . 2 +_o 0 = 0 +_o 2 = 2 \quad [*110\cdot51\cdot61 . *101\cdot31]
 \end{aligned}$$

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$$*110\cdot643. \vdash . 1 +_o 1 = 2$$

Dem.

$$\begin{aligned}
 & \vdash . *110\cdot632 . *101\cdot21\cdot28 . \supset \\
 & \vdash . 1 +_o 1 = \hat{\xi} \{ (\forall y) . y \in \xi . \xi - \iota' y \in 1 \} \\
 & [*54\cdot3] = 2 . \supset \vdash . Prop
 \end{aligned}$$

The above proposition is occasionally useful. It is used at least three times, in *113·66 and *120·123·472.

*Fig. 2: From pages 82 and 83 of Principia Mathematica Vol. 2 (1912)*⁹

⁸ *Ibid.*

⁹ Alfred North Whitehead and Bertrand Russell, *Principia Mathematica* Vol. 2 (London: Cambridge University Press, 1912), 82-83.

It takes the labor of hundreds of pages to make what we accept as *the* simplest statement of fact *meaningful*, because, for at least basic scientific epistemology, meaning is dependent on the consistency of linguistic forms and the correspondence of those forms to thought and the real world. A tall order. The same mission is professed by Gertrude Stein: “*the thing I was always trying to do was this thing.*” Many might claim that while she tried, she failed. But that claim of failure is predicated on an uncritical assessment of the comparative phrase “exact as mathematics.” Knowing that in Stein’s time, proving the exactitude of $1 + 1 = 2$ was no small feat, we might choose instead to place emphasis in this widely quoted statement of Stein’s not on “exact as mathematics” or “ $1 + 1 = 2$,” but on her claim that she “made a great many discoveries” in her pursuit of mathematical precision in poetic forms.¹⁰

Those discoveries will be the subject of this chapter. In *Tender Buttons*, Stein continues to revise and reimagine the classical laws of thought: examining the law of identity through objects, stretching and bending the possibilities of logical expression through playful and critical meditations on contradiction, and embracing the excluded middle through a metaphysics of becoming. Through the strange and impossible objects of *Tender Buttons*, Stein finds ways to draw together the historical, mathematical, emotional, linguistic, and aesthetic valences of objects. These parts come together in strange amalgamations that complicate the logical identities of the objects. Indeed, the “kinds” and “cousins” of objects in *Tender Buttons* make for those “illegitimate totalities” that Russell and Whitehead sought to

¹⁰ Stein, “How Writing is Written,” 157.

avoid. But for Stein, these are precisely the forms that the objects of modernism must take: the fragmentary nature of modern life, iterative and disconnected character of experience, and the logical paradoxes produced by matching existence to thought, make for new designs, new constellations, and new wholes. As T. S. Eliot writes in “The Metaphysical Poets”:

When a poet’s mind is perfectly equipped for its work, it is constantly amalgamating disparate experience; the ordinary man’s experience is chaotic, irregular, fragmentary. The latter falls in love, or reads Spinoza, and these two experiences have nothing to do with each other, or with the noise of the typewriter or the smell of cooking; in the mind of the poet these experiences are always forming new wholes.¹¹

Eliot’s list of these ordinary experiences out of which the poetic mind may amalgamate a new whole is an uncannily apt description of the contents of Stein’s *Tender Buttons*: where the process of writing, the smell of cooking, and indeed the experience of love and the language of philosophy, are all brought together into “new wholes.”

These wholes, however, are not wholly predicated on either classical mathematical models or even the definition of type taken from set theory. Instead, *Tender Buttons* takes the paradoxes of kind head on, continuing the philosophical (and mathematical) project of “Sacred Emily” in a way that inhabits the central paradoxes facing Russell and Whitehead’s *Principia*—the breakdown of logical concepts like inside and outside, isolation and connectedness, singularity and

¹¹ Eliot, “The Metaphysical Poets,” 247.

multiplicity. *Tender Buttons* accepts this double-bind and revels in it, examining extension and intension at the same time, understanding that the world and language are complex systems which are interactive and interdependent, like ecosystems, and can only be logically represented when one accounts for form and substance at the same time. To a classical or Newtonian episteme, the system looks like chaos. But Stein is not interested in the chaotic or random, at least not in composition. *Tender Buttons* attempts something very similar to the failed projects of the *Principia* and *The Making of Americans*: to reign in what may seem chaotic and to order it. It is still a scientific and logical enterprise, with a central mimetic goal modeled on mathematics. In *The Autobiography of Alice B. Toklas*, we learn more about Stein's "passion" for exactitude, simplification, and concentration, and "Alice" affirms that this passion and its manifestation in Stein's work endorses comparing her work to that of mathematicians:

Gertrude Stein, in her work, has always been possessed by the intellectual passion for exactitude in the description of inner and outer reality. She has produced a simplification by this concentration, and as a result the destruction of associational emotion in poetry and prose. [. . . .] She knows that poetry and prose [. . .] should consist of an exact reproduction of either an outer or an inner reality. [. . .] In Gertrude Stein the necessity was intellectual, a pure passion for exactitude. It is because of this that her work has often been compared to that of mathematicians¹²

¹² Gertrude Stein, *The Autobiography of Alice B. Toklas*, in *Selected Writings of Gertrude Stein*, ed. Carl Van Vechten (New York: Vintage Books, 1990), 198-99.

In making this assertion, Stein argues that beauty, music, decoration, or their resulting emotions should not themselves be the cause of poetry and prose. In pursuing this exactness to both “inner” and “outer” reality, *Tender Buttons* witness and performs a bend in the classical episteme, paralleling ideas raised in the new mathematics. In her prose-poems, Stein critiques the typological categories of biological taxonomy and naïve set theory and gestures toward an emerging branch of geometry: topology.

All the “things” of *Tender Buttons* are situated in an elaborate system—the system of objects, the system of portraiture, and embedded in language itself, “a system to pointing” where meaning and matter are intra-dependent.¹³ And Stein was committed, to a certain extent, to work within that system: “Of course you might say why not invent new names new languages but that cannot be done.”¹⁴ Just as in *The Making of Americans*, *Tender Buttons* uses fairly plain language and a severely limited vocabulary; although she shifts her emphasis from verbals to nouns, Stein bends the contours of language and exceeds the boundaries of knowledge-making through the forms of the previous paradigm. For Stein, the system involves the objects themselves, the detritus of language historically used to describe the objects, Stein’s situated consciousness, and the practice of writing. All had to be taken into account in her practice of “looking at anything until something that was not the name of that thing but was in a way that actual thing would come to be written.”¹⁵ Taking so many different facets of the strangeness of language (and

¹³ Stein, *Tender Buttons*, 461.

¹⁴ Stein, *Lectures in America*, 237.

¹⁵ *Ibid.*

life) into account, often all in the same short prose poem, even in the same sentence, can feel, to the reader, chaotic. Indeed topology, like set theory and other late nineteenth- and early twentieth-century contributions to mathematics, factors greatly in later complex systems theory and cybernetics, where continuity and connectivity are crucial to mapping what the classical episteme sees as chaotic behavior.

Tender Buttons sets itself up as, and at odds with, a taxonomical system of logic right away. Though it flags itself as a taxonomy through its triptych of *Objects*, *Food*, and *Rooms*, the prose poems contained within those categories stretch categorical definitions considerably. The title of the *Objects* section and the generic expectations for quantifiable objects set up by the opening titles, such as “A CARAFE, THAT IS A BLIND GLASS,” “GLAZED GLITTER,” and “A SUBSTANCE IN A CUSHION,” are complicated by later, less quantifiable nouns such as “A FRIGHTFUL RELEASE.” Toward the end of the series, the noun as the reigning grammatical category begins to falter, with titles marked by prepositional phrases, abstract concepts, and verbal imperatives, such as “IN BETWEEN,” “MORE,” and “SUPPOSE AN EYES.” Sentence-length titles join in, such as “IT WAS A BLACK, BLACK TOOK” and “THIS IS THE DRESS, AIDER.” Similarly, *Objects* contains titles that would seem to belong to *Food*, such as “A PIECE OF COFFEE” and “CUTLET.” *Food*, likewise, contains portraits of non-food, even non-objects, such as “END OF SUMMER,” as well as multiple iterations of the title “EATING” and clusters of titles which mix classes and sub-categories—“MUTTON” followed by “BREAKFAST,” “LUNCH” followed by “CUPS” followed by “RHUBARB,” “COOKING” followed by four iterations of “CHICKEN.” The

categories of *Objects*, *Food*, and *Rooms* seem discrete and yet mix, uncomfortably, logical categories. The sets are able to nest (*Food* as a category belonging to the class *Objects* for example), and some of the sets contain themselves (“OBJECTS” the poem appears in *Objects* the section). The only section for which Stein compiled a table of contents is the *Food* section, and its style—listing the titles for the prose poems run together rather than on discrete lines and separated by semi-colons—reads like a parody of an antiquated textbook or work of philosophy. And it is playfully inaccurate. The sequence of poems “ORANGE,” “ORANGE,” “ORANGES,” and “ORANGE IN” are denoted in the table of contents simply as “ORANGE”¹⁶; similarly the table of contents separates titles by semi-colon, leading us to think that “COCOA; AND CLEAR SOUP AND ORANGES AND OAT-MEAL” refers to two poems near the end of the *Food* section, but it is neither. Instead, these “titles” reappear in the second line of “ORANGE IN,” a poem not even listed in the table of contents.¹⁷

As opposed to Russell and Whitehead in the *Principia*, who struggle to hold on to the concept of kind while banishing paradoxes, Stein sets about, particularly in the *Objects* section of *Tender Buttons*, to critique typology while still playing with “sets” of objects, embracing their change and paradoxes. Stein’s project moves away from the notion of the “steady state” of classification; nothing remains in its “box” because it is constantly changing. Form is fleeting, the “things” of Stein’s prose poems, as “still lifes in change” reveal the descriptive limits of classificatory

¹⁶ Stein, *Tender Buttons*, 477 (table of contents) and 495-96 (poems). The table of contents in the Van Vechten *Selected Writings*, which I work from, is the same as that in the original 1914 publication (New York: Claire Marie, 1914; table of contents for *Food* on page 32).

¹⁷ *Ibid.*, 496.

conventions. Indeed, she insisted on calling what might more traditionally be described as “still lifes,” the pictorial genre for objects, “portraits,” the pictorial genre for subjects.¹⁸ From the very outset, *Tender Buttons* lampoons categorization and challenges our notion of the separate ontologies of subjects that do and objects that don’t.

Archival evidence suggests that *Objects* was written last, and pushed to the front of the three sections by the publisher. In a notebook for composing *Tender Buttons*, Stein lists out the sections:

General Title

Tender Buttons.

Their sub titles

Food with its list ~~don't~~

~~use studies in description at all~~

Rooms

Objects¹⁹

¹⁸ For more on Stein’s use of portraiture, see Wendy Steiner, *Exact Resemblance to Exact Resemblance: The Literary Portraiture of Gertrude Stein* (New Haven: Yale University Press, 1978). Steiner’s argument that Stein’s literary portraits of 1908-1911 reflect a “typologizing” period aligns with my claims about the typologizing impulses of *The Making of Americans*. *Tender Buttons* would fall into what Steiner argues is Stein’s visually-oriented period, though Steiner does not treat *Tender Buttons* at length, and unfortunately subscribes to the opinion that *Tender Buttons* is on the whole “unintelligible” (101). Nonetheless, there could be a very productive comparison of Steiner’s framework for Stein’s phases of portraiture with the shift I trace between Stein’s typologizing impulse and later exploration of topological forms.

¹⁹ “Notes for *Tender Buttons*, n.d. fragments,” Gertrude Stein and Alice B. Toklas Papers, Yale Collection of American Literature, Beinecke Rare Book and Manuscript Library, Yale University, YCAL MSS 76, box 74, folder 1366.

In a 1920 carnet where Stein lists pieces sent out and returned from various magazines and journals, across multiple pages she consistently renders the section titles for *Tender Buttons* “Food Rooms Objects.” In a note folded into the carnet with a numbered list, with items published crossed out, the order is instead “9. Rooms” “36. Objects” and “40. Food.”²⁰ In another note Stein writes and crosses out “Rooms. Number One” several times.²¹ Alice Toklas’s typed manuscripts of Stein’s work also begin with *Rooms*, followed by *Objects* and *Food*. Scholarly consensus has settled on a general narrative: that *Food* and *Rooms* were simultaneously written, and *Objects* followed after. *Food* had a subtitle—“Studies in Description”—though it did not appear in published versions, and table of contents, which did appear, suggesting it may have been the first composed, though its precedent was not followed in the subsequent sections. *Objects* has however lead the charge in *Tender Buttons* from its first printing—whether placed there by Stein or publisher—and has driven the critical reception of *Tender Buttons*, with *Food* and *Rooms* read as almost ancillary works. *Objects* may indeed be the culmination of the logical and poetic work of *Food* and *Rooms*, constituting an evolution from the previous styles in *The Making of Americans* and “Sacred Emily” to the markedly new style of *Objects* that has come to define *Tender Buttons* as a whole. To begin from a chronological trajectory, then, and to not avoid the “excluded middle,” my discussion of the axiomatic tendencies in *Tender Buttons* will start with the middle: *Food*.

²⁰ “Notes on Status of Writings Submitted to Publishers, etc.,” *ibid.*, box 92, folder 1707.

²¹ “Notes for Tender Buttons, n.d. fragments.”

By working through the opening prose-poem of *Food*, “ROASTBEEF,” with an interpretive eye to its logical formations, we can read it as a paradigm poem for understanding *Tender Buttons* as a whole, and as an experiment in a new form of analytical logic. To begin with the ending of “ROASTBEEF”:

This is a result. There is no superposition and circumstance, there is
hardness and a reason and the rest and remainder. There is no delight and no
mathematics.²²

The concluding remarks of the prose-poem (“this is a result”) contradict one another. Despite being grounded in hardness and reason (perhaps the hardness of reason) there is, crucially, the excess, “the rest and the remainder,” that defies axiomatic logic. That logical finitude is the delight of mathematics, that is, a solid, definable, proof at the end of calculations. But *Tender Buttons* is populated by delight and mathematics in no small degree. The portraits aestheticize analytical proofs, producing delightful paradoxes and mathematical puzzles, all while rigorously investigating the logic of representation in the modern world. And the poems do this, on the whole, through the language of analytical logic, which we see right away in the *opening* of “ROASTBEEF”:

ROASTBEEF

In the inside there is sleeping, in the outside there is reddening, in the
morning there is meaning, in the evening there is feeling. In the evening there
is feeling. In feeling anything is resting, in feeling anything is mounting, in
feeling there is resignation, in feeling there is recognition, in feeling there is

²² Stein, *Tender Buttons*, 482.

recurrence and entirely mistaken there is pinching. All the standards have steamers and all the curtains have bed linen and all the yellow has discrimination and all the circle has circling. This makes sand.²³

Stein plays here with a classic example of subject-predicate propositions, the Aristotelian syllogisms of the schoolroom. The sequence of major premise (all men are mortal), minor premise (all Greeks are men), and conclusion (all Greeks are mortal) are transformed in *Tender Buttons* into:

Major premise: all the yellow has discrimination

Minor premise: all the circle has circling

Conclusion: this makes sand

This may seem like absolute nonsense, at least if “sense” is defined as linearly logical. But I argue Stein is in fact very directly rewriting the classic “Sorites paradox” here. The Sorites paradox, or the paradox of the heap (“Soros” being Greek for “heap”) is a sequence of incomplete syllogisms related to gradual or continuous change. The commonplace example for the Sorites paradox is:

1. a single grain of sand does not make a heap
2. if n grains of sand do not make a heap, then $n+1$ grains of sand do not make a heap
3. no number of grains of sand can constitute or yield a heap

The Sorites problem in ancient logic develops into the more modern notion (in logic) of vagueness. Predicates like “heap” or “tall” do not have quantifiable, universal meaning. Analytical logic is generally, in its most axiomatic form, hostile to

²³ *Ibid.*, 477.

vagueness. In 1904, H.G. Wells suggested a moderation of the application of analytical logic to any and every aspect of life precisely on the grounds of life's necessary vagueness:

It is true you can make your net of logical interpretation finer and finer, you can fine [sic] your classification more and more—up to a certain limit. But essentially you are working in limits, and as you come closer, as you look at the finer and subtler things [. . .] the element of error increases. Every species is vague, every term goes cloudy at its edges, and so in my way of thinking, relentless logic is only another name for stupidity—for a sort of intellectual pigheadedness. If you push a philosophical or metaphysical enquiry through a series of valid syllogisms—never committing any generally recognized fallacy—you nevertheless leave behind you at each step a certain rubbing and marginal loss of objective truth and you get deflections that are difficult to trace, at each phase in the process. Every species waggles about in its definition, every tool is a little loose in its handle, every scale has its individual.²⁴

The Making of Americans and *The Principia* reached their limits, finding individuals that stretched the limits of scales and terms that became cloudy almost at the moment of their clarification. In *Tender Buttons*, Stein embraces the “vagueness” of categories in order to capture the loss, the excess, the difficult to trace, in the transformation from thing to word.

²⁴ H.G. Wells, “The Scepticism of the Instrument,” *Mind: A Quarterly Review of Psychology and Philosophy* 13 (1904): 386.

The whole of *Tender Buttons* can be read as an exercise in categorical propositions which recognize the cloudiness at the edges of logical thinking, bringing the vague to the fore, bending logic, but not completely breaking it.²⁵ Vagueness is both a familiar, common sense concept and yet an acutely puzzling aspect of the relation between language and the world, a persistent problem for philosophy. There is no consensus in philosophy or science about the nature of vagueness, as either a consequence of representation or a feature of reality itself. The paradigmatic figure for vagueness is the cloud, as it lacks a precise size, shape, and position. Stein attempts to give a definition to that example of the very lack of definition in "ROASTBEEF": "Cloudiness, what is cloudiness, is it a lining, is it a roll, is it melting."²⁶ The edge (lining) of clouds may be distinct even as they are on the move (rolling), but they are always threatening to dissolve, to melt, into some other form. Clouds are at once distinct and vague, serving an apt metaphor for the topological transformations of objects and information in *Tender Buttons*. Despite the vagueness and uncertainty at the heart of Stein's information theory, there is "A transfer, a large transfer, a little transfer, some transfer, clouds and tracks do

²⁵ Stein's vague propositions find ample definition in C.S. Peirce's 1902 definition of "vague":

A proposition is vague when there are possible states of things concerning which it is intrinsically uncertain whether, had they been contemplated by the speaker, he would have regarded them as excluded or allowed by the proposition. By intrinsically uncertain we mean not uncertain in consequence of any ignorance of the interpreter, but because the speaker's habits of language were indeterminate.

C. S. Peirce, "Vague," *Dictionary of Philosophy and Psychology*, ed. J.M. Baldwin (New York: MacMillan, 1902), 748.

²⁶ Stein, *Tender Buttons*, 481.

transfer, a transfer is not neglected.”²⁷ In other words, *Tender Buttons* aims to communicate, though that communication recognizes the inherent vagueness in any moment of transfer—there may be a large transfer, or a little transfer, depending on a number of factors for both the speaker and interpreter. Clouds are formed through natural feedback loops of evaporation, condensation, and precipitation. Stein’s information theory follows her definition of “cloudiness,” which follows the cycle of cloud formation: there is lining, the condensation into a form that an interpreter/observer can discern; there is rolling, the movement of meaning into another form, whether it is the runoff water after precipitation that will eventually evaporate and re-condense into another cloud, or whether it is the cloud itself on the move to take a new shape through the eye of the observer; and the melting, the precipitation that individuates the components of a given form and moves the particles on to take another shape, find another form, or become another meaning. Stein’s statement that “clouds and tracks do transfer” indicates that information can be conveyed potentially and effectively if one sees it as a cloud rather than a train on a linear track, conveying meaning from speaker to interpreter via a singular, progressive, and non-complex channel.²⁸ Clouds, like Stein’s attempts at a mimetic mode, like Russell and Whitehead’s paradoxes of self-reference and recursion, are feedback loops. And in the affective weather complex, it’s only a matter of time before clouds merge or dissipate.

²⁷ *Ibid.*

²⁸ *Ibid.*

Even before the final rewrite of the Sorites paradox, the very object of “roastbeef” introduces Stein’s attempt to logically grasp the cloud—that is, to equate language and thing when the thing is constantly on the move:

In the inside there is sleeping, in the outside there is reddening, in the morning there is meaning, in the evening there is feeling. In the evening there is feeling. In feeling anything is resting, in feeling anything is mounting, in feeling there is resignation, in feeling there is recognition, in feeling there is recurrence and entirely mistaken there is pinching.²⁹

There is no being of the roastbeef in Stein’s text that is not a becoming—that is, we are trying to grasp an object as it is changing. Like the cloud being always somewhere in a cyclical transformation of water, the meat under description here is in the process of being cooked. The portrait of roastbeef reflects Stein’s “passion for exactitude” to both “outer” and “inner” reality, in that Stein’s literary portrait attempts to capture the interrelationship of the process of becoming (inner reality) and the apparent properties (outer reality) of the object.³⁰ The inside of the beef is as yet un-roasted, its pink flesh “sleeping” while the outside flesh is “reddening.” Aligned with the phases of cooking for roastbeef are the phases of the day, and the repetition of structure among the first four clauses places them in an analogical relation, *inside: sleeping as morning: meaning*, just as *outside: reddening as evening: feeling*. This series of analogies aligns “meaning” with the vague and underdeveloped, the fresh and inchoate, while “feeling” is aligned with the developed and matured. Then everything is re-oriented as Stein shifts the subject

²⁹ *Ibid.*, 477.

³⁰ Stein, *The Autobiography of Alice B. Toklas*, 199.

from the roastbeef in a series of analogical descriptions to feeling itself. “In the evening there is feeling” breaks into its own sentence and begins the next description, where feeling is described as both resting and mounting, resigning and recognizing. But “in feeling there is recurrence”—so the analogy between cooking and the revolution of the earth around the sun in a day’s time is a failed one; the analogy is “entirely mistaken”—the progress of pink, raw flesh to reddened roastbeef seems akin to the progress from morning to evening, but the day’s cycle begins again. The roastbeef is consumed, and perhaps begins another cycle—of digestion, the transformation of calories to energy—but does not have the same cyclical “recurrence” indicated in the end of this first section of the poem.

The first logical step of the poem would be to determine that the item reddening in the poem is the “ROASTBEEF” of its title, that is, a piece of beef being roasted. And this logic holds up early in the poem. But in order to keep logical consistency, to make the analogies all work, there must be a substitution, from the literal roastbeef of the title to female sex organs, a typical figurative substitution throughout *Tender Buttons* that has been the focus of allegorical and biographical scholarship on the text. The series of propositions in the opening of “ROASTBEEF” do not hold for uncooked beef, for the undeveloped “meaning” ascribed to the title at the onset of the poem (“in the morning”). They do, however, hold for genitalia, a more developed figurative reading that develops when one switches from the register of literal “meaning” to what Stein is describing in “feeling”—here, the evening is both the time of the sexual act (resting, mounting, and resigning) and the evening is the moment of sexual and poetic recognition. The evening will inevitably

come again, and sex will (hopefully) be repeated. Feeling our way through these poems may be difficult, but if we land on the simplest meaning without following the logic all the way through, we're still "sleeping" in the "morning," we may end "entirely mistaken," and as readers need "pinching" in order to wake up and pay attention.

This demonstration by Stein in the opening of "ROASTBEEF" teaches us how to read carefully, stretching logic to include multiple objects under a single heading, but slowly, continuously, transforming the roast in the oven into the lover in our bed. After this lesson, and her play on the Sorites paradox ("this makes sand"), we should be well equipped to continue reading, introduced as we have been to the "standards" of Stein's logic. So, fittingly, the next section of "ROASTBEEF" after "This makes sand" begins:

Very well. Certainly the length is thinner and the rest, the round rest has a longer summer. To shine, why not shine, to shine, to station, to enlarge, to hurry the measure all this means nothing if there is singing, if there is singing then there is the resumption.³¹

Again, Stein employs logical transitions and terms. "Very well."—that is, if we agree that this is the case (that on the inside there is sleeping, and so on) the argument will move forward. And the language is very leading: "Certainly" Stein tells us, "the length is thinner and the rest, the round rest has a longer summer." To establish the logical character of her treatise, Stein ruminates on various forms of abstract measurement ("length," "thinner") and the way we use measurements to

³¹ Stein, *Tender Buttons*, 477.

understand the natural world (various nations around the globe have longer days or periods of warmth than the rest, particularly around the equator line, thus “the round rest has a longer summer”). These are things we can grant. “To shine, why not shine, to shine, to station, to enlarge, to hurry the measure”—why not make these discoveries (“shine”), measure the world (“hurry the measure”), communicate these particulars, even manipulate them (“to enlarge”)? This is the enterprise of knowledge formation. And yet, Stein follows this with an if/then construction which, like the “feeling” earlier in the poem, solidifies the logic of the poem while undermining the logic of society’s master narratives: “all this means nothing if there is singing, if there is singing then there is the resumption.” Measurement of the globe through longitude and latitude, calculating the time for cooking a roast in a ratio of weight to degree of heat are all useful things. And indeed Stein uses, throughout the entirety of *Tender Buttons*, evaluative phrases like “certainly” and “why not?” as both parodic and sincere. But the feeling of the sun shining, the affective properties of music, the thrill of the erotic, all of which recur and resume much like a replicable physical law but with some excessive individuation, cannot be wholly described in the language of logic. That doesn’t mean Stein gives up on the genre; *Tender Buttons* continues to play with analytical logic through all sections of the text, logicizing the aesthetic and aestheticizing logic in a unique attempt to put “things into words,” whether those “things” are materials like beef or affects like a moment of sexual pleasure.

The “things” which Stein attempts to produce portraits of in *Tender Buttons* are singularities—the singularity of a moment of sexual pleasure, or the taste of a

roast that has been contingently butchered, cooked, and spiced in some non-replicable way, or the outline of a cloud that is just at that moment merging into another. This singularity challenges a mimetic enterprise bound by the foundational rules of language. But, rather than give in to the chaos of radical singularity and subjectivity, Stein attempts to capture objects and affects within a system, using the language of logic and the concepts of mathematics to do so.

In *Tender Buttons*, Stein writes “in a way that [the] actual thing would come to be written,” pushing beyond the classical definition of representation or description.³² She does not aim for a naïve horizontal correspondence between language and thing; rather she desired to *make* words things, to find, describe, and enact the homeomorphism between word and thing, in order to make writing *real*: “the name of a thing might be something in itself if it could come to be real enough but just as a name it was not enough something.”³³ She attempted to “completely replace” the noun/name with “the thing in itself,” which she argues can be done in poetry, but not in prose.³⁴ That replacement happens throughout *Tender Buttons* in the form of elaborate equations, in which the absolute break between sign and referent is denied in favor of a continuous deformation of matter into language. In order to do so, Stein pushes past the science she knows from her school days, the typology and taxonomy of the biological sciences, and gestures toward a more abstract science that was just becoming crucial, not only to modern mathematics but

³² Stein, *Lectures in America*, 237.

³³ *Ibid.*, 242-43.

³⁴ *Ibid.*, 245.

to the coming information age. To transform the object world into language, Stein rejects typology for topology.

Topology, an emerging, modern offspring of geometry, offers a schema for understanding gradual change and continuous transformation, and understands objects through resemblance, closeness, and gradients rather than rigid, fixed types. In *Tender Buttons*, Stein dwells on the topological becomings of objects: to fully grasp an object, Stein places herself *between* the material and the immaterial, between the object and its representation, finding the homeomorphism between them—that is, the continuous deformation, the bending and stretching, that guides one between two configurations, transforming one into the other and back without a loss of certain essential properties.

Though treatises on the impossible objects and geometrical puzzles that topology studies date back to the eighteenth century, topology as a distinct area of mathematics does not emerge until the last decades of the nineteenth century, coeval with the set theory of Georg Cantor (one of Russell’s main interlocutors in the *Principia*) and the “analysis situs” or qualitative geometry of Henri Poincaré (a French mathematician and theoretical physicist whose theories paved the way for Einstein’s theory of special relativity). In the same year as *Tender Buttons*, Felix Hausdorff published one of the first textbooks of set theory, the *Grundziige der Mengenlehre*, in which he coined the term “topological space,” a notion that laid the real groundwork for topology becoming a specialized area of mathematics.³⁵ The

³⁵ Felix Hausdorff, *Grundziige der Mengenlehre* (Leipzig: Veit, 1914). An incomplete reprint and translation appeared in 1949 (Felix Hausdorff, *Set Theory*, trans. John R. Aumann [New York: Chelsea Publishing Company, 1949]).

typology that Russell and Whitehead use to designate objects in the *Principia* divides objects into sets according to their differing properties. Topology, though it depends on set-theoretic notions, is a mathematical language used to talk about shapes, sizes, relative positions, and space in ways which privilege continuity and closeness. Topological objects are those whose qualitative properties are invariant under transformation. Specifically, topology accounts for transformations in which objects continuously deform, stretching and bending but not breaking or tearing. Similarly, space is not thought of in terms of distance and division, but through the concepts of “neighborhoods” and closeness. The objects of topology are objects in motion, and deforming over time. This is the geometry of the strangely flexible, like a rubber-band transforming from loop to fit around a square. The square and the loop here are homeomorphic; rather than say these are two different, fixed types of object (square and loop) they are topologically equivalent.

While *Food* reminds us of the crucial middle of processes in topological transformations—the becoming inherent in the transformation of discrete ingredients to dish, raw flesh to roast, or the assimilation of difference into sameness through ingestion—*Objects* stages Stein’s philosophical intervention against typological categories most directly, attempting to grasp the topological characteristics of seemingly fixed objects.

The first iteration of “A BOX” from the *Objects* section offers a critique of typological thinking:

A BOX

Out of kindness comes redness and out of rudeness comes rapid same question, out of an eye comes research, out of selection comes painful cattle. So then the order is that a white way of being round is something suggesting a pin and it is disappointing, it is not, it is so rudimentary to be analysed and see a fine substance strangely, it is so earnest to have a green point not to red but to point again.³⁶

Kind, kindly, and kindness are major keywords throughout *Tender Buttons*.³⁷

“Kindness” and “kind-ness” play off each other in one of the central ironies in the text. Despite the pleasant connotations of “kindness,” kind-ing, that is, categorizing and analyzing objects as specimens, is represented as the opposite of benevolence. The title of the volume begins this conceptual play before we even get to the text: “tender” as an adjective modifying buttons suggests the text is about a *kind* of buttons, and at the same time “tender” is a synonym for kindness, gentleness.

“A BOX” provides one of the most straightforward examples of Stein’s critique of the hard, fixed categorization of being in *Tender Buttons*. “A BOX” presents various branches of scientific investigation: kind-ness, or categorization; first principles or fundamentals (our questions, the passage implies, come “out of rudeness” which we are meant to connect to the later “rudimentary”); research, which is here understood in terms of observation (“out of an eye comes research”); and reduction: “out of selection comes painful cattle.” Selection, in this biological register, suggests how selecting for genes and reproducing eliminates spontaneity

³⁶ Stein, *Tender Buttons*, 463.

³⁷ “Kind” appears 18 times in the text, “kinds” 2 times, “kindness” 5 times, “kindly” 2 times, a total of 27 appearances. “Tender” appears only 10 times, and “tenderness” once.

and difference, boxing in traits, and creating the debased category of *cattle*, rather than *cows*. In other words, kind-ness can thing-ify being. The assumed stability of “order” that scientific and philosophical practice gives to the world of being is here critiqued. Colors, shapes, and kinds are set in motion in such a way that their meanings are changing, that the categories blend together and defy the existing order: there is a “white way of being round” as opposed to the “right” way, which would be to keep the registers from mixing, for “right” way of being round to be defined by Platonic ideals of roundness, not by a color, a refugee from another register for kinding. But to follow a stream of resemblances and relations need not be “disappointing” if we follow the poem’s “rudimentary” idea to “see a fine substance strangely,” to avoid the simple impulse to categorization based on kinds, so as to “have a green point not to red” (i.e., not to start to break things down based on the category of color) “but to point again” and to continue on down the line of meaning. Red here stands in both for a neighbor to green in the species of “color” and for the particular violence of limiting meaning (“Out of kindness comes redness”). If the green points to red, it will not point again—red acts as an injunction, a stop sign.

Though the titles of the poems purport to give us descriptions or portraits of the objects named, replaying the taxonomical ordering of being, the poems argue that the very categorizing and “kinding” of things causes harm; the practice limits and debases the entities it acts on. Tables, boxes, pins, points, and other trappings of this specific scientific enterprise can be found throughout the *Objects* section.

Tables, in particular, populate all three sections of *Tender Buttons*. One of the tables in *Objects* critiques the taxonomic table most directly:

A TABLE

A table means does it not my dear it means a whole steadiness. Is it likely that a change.

A table means more than a glass even a looking glass is tall. A table means necessary places and a revision a revision of a little thing it means it does mean that there has been a stand, a stand where it did shake.³⁸

The “whole steadiness” of meaning produced in a taxonomic table is undermined in two ways. In the implicit comparison between the domestic custom of “necessary places” at a family table or dinner party to the “necessary places” of a scientific table, she suggests the cultural construction inherent in allegedly natural categories. This comparison is also operative in “A SUBSTANCE IN A CUSHION”:

Callous is something that hardening leaves behind what will be soft if there is a genuine interest in there being present as many girls as men. Does this change.³⁹

The planning for the places at the dinner party relies here on balancing gendered categories—“girls and men.” It is ambiguous whether this “genuine interest” is the thing that *would have been* “soft,” and thus valued for its regard for the guests’ comfort, or whether this gesture is itself the referent for the opposite, something “callous.” “Callous” here is both cruel disregard and a pun on “callus”—“that hardening” of tissue that “leaves behind what will be soft.” Either way, we are

³⁸ Stein, *Tender Buttons*, 474.

³⁹ *Ibid.*, 462.

invited to think about what is left behind that which is hardened and fixed: our soft flexibility, our tenderness and care, whether in defining things, understanding gender dynamics, or navigating the social etiquette of an early twentieth-century dinner party. There is a necessary hardening and fixity whenever we write: the callus on our writer's finger, from addressing invitations to the party, hoping for the RSVPs to balance genders, is the callus that forms on any writer's finger and the marks on the page produced when they fix the objects of their gaze in writing.

"Does this change" is an open question, but it has been provisionally answered in both poems: the opening line of "A SUBSTANCE IN A CUSHION" tells us "The change of color is likely and a difference a very little difference is prepared"⁴⁰ just as "A TABLE" reminds us "It is likely that a change."⁴¹ The inevitability of change, of "revision," also causes what has been posited ("there has been a stand") to be destabilized: "a stand where it did shake." But it's important to note that Stein is not throwing the table out just because it has a wobbly leg: the table, in its many and layered meanings, is essential to her enterprise in *Tender Buttons*. In *A Primer for the Gradual Understanding of Gertrude Stein*, she explained her process for writing the object-portraits in this way:

I used to take objects on a table, like a tumbler or any kind of object and try to get the picture of it clear and separate in my mind and create a word relationship between the word and the things seen⁴²

⁴⁰ *Ibid.*, 461.

⁴¹ *Ibid.*, 474.

⁴² Gertrude Stein, *A Primer for the Gradual Understanding of Gertrude Stein*, ed. Robert Bartlett Hass (Santa Barbara: Black Sparrow Press, 1971), 25.

Reading this reflection together with “A TABLE” we can see how Stein’s attempt to “get the picture of” the tumbler “clear and separate” in order to construct the words that would bring it into representation was always in a sense a failure: the clarity and separation were always fleeting. Regarding the object “on a table” takes her instead to excesses of meaning (“a table means more”) in which the connections between objects across the taxonomy insistently suggest themselves—looking at the tumbler we start to see “more than a glass,” that is that glass, because “even a looking glass is tall.” Like the barber paradox, like Stein’s objects, each time we try to define something in isolation it becomes reflexive, recursive: transparency becomes reflection and objective becomes subjective as the tumbler goes from “clear” to the mirror of the “looking glass.”

The second iteration of “A BOX” in the *Objects* section continues exploring boxes on tables, both in the object world and the world of category-visualization. Like many of the other objects imagined through the prose poems in *Tender Buttons*, her boxes are an impossible objects: they critique their own enterprise, and both advocate and enact expanding beyond their own borders. The fact that there are two “A BOX” poems with identical titles again critiques the reduction of individual entities to specimens representing the category. The two opening paragraphs of the poem set in motion a critique of man-made boxes for being:

A BOX

A large box is handily made of what is necessary to replace any substance. Suppose an example is necessary, the plainer it is made the more reason there is for some outward recognition that there is a result.⁴³

“Any substance” from creation needs to be “replaced” by the box which is “handily made”—that is, both man-made and convenient. Convenience plays into the way we generate examples. When an example is necessary, “the plainer it is made the more reason there is for some outward recognition that there is a result”—that is, the more reduced and idealized the model, the more recognizable the target. From later in the same poem:

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.⁴⁴

Imagine that these natural substances are replaced by their man-made representations, as boxes on a formal table: that is, like boxes on a periodic table, representing elements. Early iterations of the periodic table, organized by atomic weight, adopted in the 1870s and 1880s into curriculum, would have been the centerpieces of Stein’s chemistry classes. But this typology is deemed somehow negligent: “Lax, to have corners, to be lighter than some weight,” the poem continues in describing the boxes.

Stein’s boxes, in the second iteration of “A BOX,” seem to be stretching off the page, defying the two-dimensional nature of boxes in a graphic table. “A box is made sometimes and them to see to see it neatly and to have the holes stopped up makes

⁴³ Stein, *Tender Buttons*, 465.

⁴⁴ *Ibid.*

it necessary to use paper”: for “them” to see it, that is, for the majority to perceive it, and to perceive it whole (“to have the holes stopped up”) “makes it necessary to use paper”—to draw it out, flatly, plainly, in a recognizable representations (for there to be an “outward recognition that there is a result”).⁴⁵ And yet, when Stein begins to describe the boxes on the table, the description stops being “plain” and we’re unable to “see it neatly,” as the image of square boxes shifts to the image of cubed boxes. To re-quote and add more of the relevant passage:

[. . .] 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. The one, one is the same length as is shown by the cover being longer. The other is different there is more cover that shows it. The other is different and that makes the corners have the same shade the eight are in singular arrangement to make four necessary.⁴⁶

A three-dimensional box has eight corners (or vertices). In reality, you can’t see all eight corners of a three-dimensional box at once “in singular arrangement.” Unless that box is a wire framed cube, with no actual sides to obscure any corners, or the two-dimensional drawing of such a box. Such a box, that is, a box with eight visible corners, is called a “Necker cube,” named after the Swiss crystallographer Louis Albert Necker, who first described the optical illusion in 1832. One of the most famous optical illusions (rivalled only by the duck-rabbit that Wittgenstein, among many other philosophers, was so fond), the Necker cube is more than a curiosity or party-trick; it demonstrates much about perception and representation.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

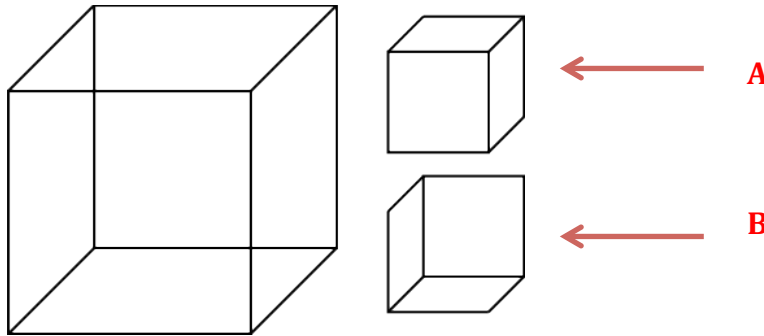


Fig. 3: Ambiguous Necker Cube (left); Interpretation A (top right); Interpretation B (bottom right).

Though the brain is said to switch spontaneously through two interpretations—A and B—there are, in a sense, *three* boxes. One is the ambiguous Necker cube itself, the next two are our imposing depth and viewing the box akin to interpretation A, and akin to interpretation B. Our perception leads us to a three-dimensional interpretation immediately; it's in fact *difficult* to see the box as a two-dimensional line drawing. The two-dimensional perception has no ambiguity—it is a line drawing of various intersecting shapes. The three-dimensional perception is ambiguous—if the eight corners are visible we need to decide *which* four corners (for which we have two choices) necessarily make up the front face of the cube. Or, as Stein has it: if “the eight are in singular arrangement to make four necessary.” Wittgenstein uses the Necker cube in the *Tractatus Logico-Philosophicus* to speak to how logical language such as propositions or diagrams cannot strictly describe multiple phenomenological aspects, for in the case of this object “we really see two different facts” in one physical construction.⁴⁷

⁴⁷ Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. C. K. Ogden (London: Routledge & Keagan Paul, Ltd., 1960), 145.

This is not the only optical illusion suggested in *Tender Buttons*. Another optical illusion from the ending of “A LONG DRESS” introduces a natural illusion:

What is the serene length, it is there and a dark place is not a dark place, only a white and red are black, only a yellow and green are blue, a pink is scarlet, a bow is every color. A line distinguishes it. A line just distinguishes it.⁴⁸

Stein compares the preeminent optical illusion, a rainbow (“a bow is every color”), to fabric. The colors of the dress shift depending on the light, and depending on its cut; how the shapes of the gown are perceived by the observer can affect the perception of color as well.⁴⁹ The line of the gown distinguishes the color, but a perceived line between the colors of the rainbow also just distinguishes the rainbow’s bars. And a line of prose distinguishes our perception of an object within a poem. Similarly, in the case of the boxes on the table suggesting a Necker cube, a single line can distinguish between two very different perspectives. Stein points out, in these poems, how illusions and ambiguities are subtle (a line *just* distinguishes it), and, in fact, simple. The line can also be our line of sight—in the case of the dress and the Necker cube, our perceptions change while the object itself remains materially unchanged. Throughout *Tender Buttons*, Stein presents us with ambiguous and impossible objects, where front, back, inside, outside, and other standard orienting principles do not and cannot stably apply.

⁴⁸ Stein, *Tender Buttons*, 467.

⁴⁹ The interplay of Wittgensteinian aspect-switching, mediation of the object as represented (whether poetic or a photographic), and both natural and social influences on the perception of the dress by the observer are perhaps nowhere better demonstrated than in the world-wide social media phenomenon of “#thedress” in late February of 2015.

In *Tender Buttons* we come upon objects in a defamiliarized state; despite the titles seeming to be establishing shots for the scene we're entering into, they instead set up our expectations such that we are even more shocked at what we see.

Reading Stein's strange portraits of the objects alleged in the titles might be compared to the experience of absentmindedly sipping your coffee when you were expecting your glass of water. Either we find ourselves in the presence of an object *in medias res*, between one state of being and another—like the moment of a carafe shattering for instance—or we find ourselves in the position of an alien explorer, encountering everyday objects as if for the first time, trying to come to an understanding of them. Stein invites us into that inquiry, often showing us the joy of observation and experimentation, opening up an object or word to new associations, and giving us new ways of seeing. Just as often, as in the second iteration of "A BOX," we see how our conventional ways of understanding being—searching out examples, reducing, categorizing—can be, at best, ridiculous, and more frequently, harmfully reductive.

"A BOX," like so many of the other poems throughout *Objects* moves through classic Aristotelian taxonomy—the binomial system of definition and difference, or genus-differentia.⁵⁰ The title gives us the genus, "box," and then the "large box" beginning the poem is differentiated from other boxes within the same genus. However, while Aristotle presented those elements in his taxonomy to be fixed and

⁵⁰ See genus/differentia particularly in Aristotle's *Categories*, *The Topics*, and *Prior Analytics*, collected as *The Organon, or Logical Treatises of Aristotle* (London: H.G. Bohn, 1853). For an account of how Aristotle's theory of genus and differentia develops across these writings, see Edgar Herbert Granger, "Aristotle on Genus and Differentia," *Journal of the History of Philosophy* 22.1 (January, 1984): 1-23.

unchanging, Stein's objects lack Aristotle's hierarchy, and are always in flux. And whereas Aristotle placed substance in genus, not in differentia, Stein does the opposite: in Stein's object world "the difference is spreading" in such a way that difference is not merely a differentiating quality of being, that is a characteristic of kind, as Aristotle defines it in *Topics*, but the condition of identity. When we capture being in boxes, we "replace" substance ("A large box is handily made of what is necessary to replace any substance"⁵¹), but Stein suggests substance should instead be understood in reference to change, as we are reminded in "A SUBSTANCE IN A CUSHION" and throughout *Tender Buttons*.

The objects of the *Objects* section of *Tender Buttons* are impossible objects—objects which, at their very moment of definition and the moment they are "fixed" in a portrait, become something slippery. For example, the description of a shawl: "A shawl is a wedding, a piece of wax a little build. A shawl."⁵² The shawl may remain a shawl, but exceeds our commonplace definition of shawl. The expansion of the "wedding" is contracted in "a piece of wax a little build." "Piece" and "little" indicate a contraction that leads us back to the simple statement of the image: "A shawl." But the contraction and expansion co-exist—"piece" and "little" imply a return to an understandable unit, but with the wax-like build-up of meanings that the shawl has accrued in just a few lines. In other words, we still have a tangible object, but one that has been materially girded with an excess of meaning. The shawl appears not only covered in the waxy patina of language and culture, but like wax is malleable,

⁵¹ Stein, *Tender Buttons*, 465.

⁵² *Ibid.*, 475.

transformable, while maintaining some essential shawl-ness. In this way the shawl resists being a “type” and is instead a kind of topological object.

It is a common reading of Stein’s trajectory from *The Making of Americans* to *Tender Buttons* to speak of a shift from subjects to objects, and further of Stein’s rejection of the scientific enterprise of descriptive psychology in favor of “purely linguistic” exploration and experimentation. And certainly the *Objects* section, and *Tender Buttons* as a whole, may appear to be rejecting analytical logic by turning logical statements on their heads. Russell, in 1959, reflecting on the *Principia*, claims “I no longer think the laws of logic are the laws of things; on the contrary, I now regard them as purely linguistic. I no longer think of points, instants, and particles as part of the raw material of the world.”⁵³ It is tempting to read Stein’s explorations of linguistic indeterminacy in *Tender Buttons* parallel with Russell’s swing in opinion. But the poems of *Objects* nevertheless hold together the laws of logic with the laws of things, rather than separate them. And the poems are populated with “instants,” and “particles” and the “raw material of the world” as well as linguistic elements, in such a way as to make all of these elements of being *present* at the same time.

Consider these key words all muddled together in “A SELTZER BOTTLE”:

A SELTZER BOTTLE

Any neglect of many particles to a cracking, any neglect of this makes
around it what is lead in color and certainly discolor in silver. The use of this
is manifold. Supposing a certain time selected is assured, suppose it is even
necessary, suppose no other extract is permitted and no more handling is

⁵³ Bertrand Russell, *My Philosophical Development* [1959] (New York: Routledge, 1997), 77.

needed, suppose the rest of the message is mixed with a very long slender needle and even if it could be any black border, supposing all this altogether made a dress and suppose it was actual, suppose the mean way to state it was occasional, if you suppose this in August and even more melodiously, if you suppose this even in the necessary incident of there certainly being no middle in summer and winter, suppose more than of consequence, it is not final and sufficient and substituted. This which was so kindly a present was constant.⁵⁴

In finding the “mean way to state it” Stein mixes the key words in the linguistic laws of logic—suppose, necessary, if, consequence, final, sufficient—with key words in the laws of things, that is existential logic—actual, present, constant—with instances of the “raw material of the world”—particles, color, and things like bottles and dresses. We aren’t able to “neglect” these particles even as we abstract things into descriptors like “incident.” Again even though Stein’s objects do not behave according to the classical laws of logic, and far from it, she attempts to see together, like a aspect-switching optical illusion, the laws of linguistic representation and the laws of things; though there are fine lines between them, and we might think of “particles” both as the raw material of the world or as abstract entities in a logical schema. In other words, the “message is mixed with a very long slender needle.”

And this is why *Tender Buttons* grasps at logical systems that can handle the vague, the fuzzy, and change. Stein’s shift from an approach to being based on type,

⁵⁴ Stein, *Tender Buttons*, 466-67.

or kind, to a sense of becoming, along the lines of topology, is nowhere more evident than in the opening portrait of *Objects*, in the now very famous carafe:

A CARAFE, THAT IS A BLIND GLASS

A kind in glass and a cousin, a spectacle and nothing strange a single hurt color and an arrangement in a system to pointing. All this and not ordinary, not unordered in not resembling. The difference is spreading.⁵⁵

The many critiques of typology raised in the *Objects* section come together here, through the key words and concepts that will play out in the remaining poems—kind, resemblance, hurt and limitation, arrangement and order, system, point/points/pointing, and difference.

We begin by cataloguing an object—a carafe. The carafe is further identified in the title through the language of logic: “that is,” i.e., id est. That is, a blind glass. The carafe is “a kind in glass and a cousin”—that is, the carafe is a member of the genus “glass,” differentiated from the general class via the adjective “blind.” It is a cousin of other glass specimens, “arranged in a system to pointing.” Stein’s version of an Aristotelian taxonomy operates via “cousins” and resemblances like a biological taxonomy, but at the same time, her objects become intensely individualized. The glass carafe is “nothing strange”; that is, it is an ordinary domestic object. And yet, it is “not ordinary”—not orderable according to a simple taxonomy of object, shape, or color. That said, Stein is crafting her own version of a catalogue, where things are not necessarily “unordered” just because they are “not resembling” what we would expect from a simple taxonomy of domestic objects.

⁵⁵ *Ibid.*, 461.

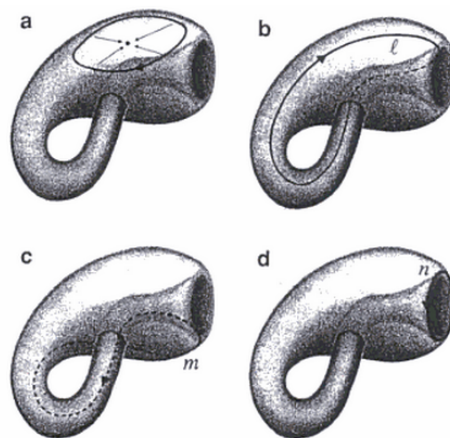
Though critics have noted that “cousin” was Alice’s code word for their relationship, this doesn’t change our ability to see the term as referencing the philosophical category of relations, specifically the relations of objects to their assigned categories. Though the word has a pleasant connotation in the Stein’s personal, amorous relationship, it nevertheless stands as a marker for us to continue to investigate the potentially negative consequences of categorizing impulses, the limits of “an arrangement in a system” which is rigidly ordered and tries to create sameness rather than recognizing difference.

Stein’s “not unordered” catalogue in *Tender Buttons* is a call for a new order. Stein’s catalogue of impossible objects cannot be rendered via extant philosophical typologies not because there is no order, not because there is no system at all, but because when we begin to examine the differences in the genus-differentia model, that difference is always on the move: “the difference is spreading.” Stein’s “portraits” might as well be still-lives of change: objects stretch their shapes and meanings to spread beyond the bounds of the table, box, or chart.

As Stein takes up the carafe, it is a kind, a cousin, a spectacle—a thing to be seen. But the carafe is transformed under her gaze. Once grasped within a system of objects and language, the carafe’s identity, its difference from the overall genus of objects begins to spread. The opening poem of *Tender Buttons* traces a shift from typology to topology—from a fixed, categorizable, logical object, to an impossible object, whose very existence necessitates a higher-order logic where concepts like inside, outside, measurement, and perspective cease to follow commonplace logical rules. The difference between inside and outside, thing and representation, is

spreading. Though the carafe is a “kind in glass” it escapes typology as a *topological* object.

One of the most well-known topological objects is the Klein bottle,⁵⁶ first described by German mathematician Felix Klein in 1882. It can be modeled in blown glass by stretching the neck of a wine bottle, passing it through the inside of the bottle, and connecting it to the bottle’s base, though the purely geometrical figure is impossible to realize in a smooth transformation without recourse to the fourth dimension. The Klein bottle is a continuous one-side structure. As a surface with no clear boundaries, no crease or fold, there is no way to orient left or right, or to determine where inside and outside begin. Because of this, the Klein bottle has no volume, no content. It is not empty, but it both serves as a container and contains only itself.



⁵⁶ There is historical confusion about whether Klein intended his object to be named the “Klein bottle” or “Klein surface”; both have been used in English and in the German, sometimes *Fläche* and other times *Flasche*, the former translating to “surface” and the latter to “bottle.” There is no conceptual competition between the two terms, as the Klein object *is* a surface *and* a bottle, though it contains only itself.

*Fig. 4: Klein Bottle*⁵⁷

The carafe in *Objects* not only suggests a critique of typology, but also begins to suggest the topological stretching and bending that Stein will perform on her objects in order to get to their essences, to transform things into words. In *Tender Buttons*, Stein attempts to solve a central problem of *The Principia*, that is, the matching of intensions and extensions (properties and objects). Russell's theory of types failed, in part, because he assigned types to both objects and meanings, often without logical distinction. Thus objects from the world, and statements about that world, get jumbled together in his typology. This was a problem for Russell, who wanted to assert a bedrock of logic separate from and prior to the complications of the messy, experienced universe. This is not a problem for Stein, whose poems flow between intension and extension, expand and contract, reduce and transform, in the strange alchemy of her prose. The collection of poems, particularly the *Food* section, is dominated by the process of cooking, and aptly: like the roast beef, her objects move through transformations of property and description. Each object is a complex of being, material, language, and it transforms as we encounter it, from one body to another's body through the process of consumption, from raw flesh to dish, from *cattle* to *beef*. Stein mixes the language of cooking with the language of mathematics; in mathematical topology the privileged operations are translation, rotation, twisting, stretching, bending, transforming, rather than cutting or breaking.

⁵⁷ Shigeru Tanaka, "Information Representation and Self-Organization of the Primary Visual Cortex," in *Natural and Artificial Parallel Computation*, ed. David L. Waltz (Philadelphia, PA: Society for Industrial and Applied Mathematics, 1996), 118, fig. 12.

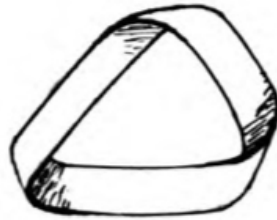


Figure 1

Fig 5.: Möbius Strip⁵⁸

Most readers of Stein would already be familiar with the analogy of Stein's prose to the most famous impossible object of topology, the Möbius strip, a surface with a single, continuous curve and thus only one boundary component. The Möbius strip is non-orientable—that is, orienting terms like inside, outside, left, right, beginning, end have no application to the object outside of the paradoxical. Similarly, Stein's lines of prose circle back on themselves, repeating and yet changing so slightly it's hard to name where the change began. "Like the Möbius strip," writes Ulla Dydo, "the world of Stein's work has no beginning, middle, or end, and her perceptions back in upon themselves in a continuous process that makes inside and outside indistinguishable, one, complete only in its continuing."⁵⁹ While the comparison of Stein's style to the Möbius strip is usually made by critics as a generalization, a metaphor for the difficulty of orientation in her work, there is actually a concrete example in "ROASTBEEF," where Stein gives a Möbius-like description of a ribbon:

⁵⁸ Margaret Lawrence, "A Topological Study of Surfaces," (Masters thesis, University of Wisconsin-Madison, 1913), 2.

⁵⁹ Dydo, *A Stein Reader*, 326.

Around the size that is small, inside the stern that is the middle, besides the remains that are praying, inside the between that is turning, all the region is measuring and melting is exaggerating.

Rectangular ribbon does not mean that there is no eruption it means that if there is no place to hold there is no place to spread. Kindness is not earnest, it is not assiduous it is not revered.⁶⁰

From this description we can imagine a “rectangular ribbon” arranged in a circle (“around”), but with a twist. The “stern,” as a term of orientation when describing a ship or boat, is the rear-most part of the ship. In Stein’s configuration, however, the stern is the middle, not the end. If you attempt to orient yourself to the “inside” of a physical manifestation of Möbius strip, such as a strip of paper or ribbon, you’ll find yourself at a place where the fabric is turning, a place between inside and outside and technically neither, as Stein describes it: “inside the between that is turning.” Attempts to measure, to draw a line, to dissect, to enact on the region the usual mathematical actions, leads to paradox—categories like edge and center, all the descriptors of the “region” of the object, are “melting” and “exaggerating.” Stein describes this impossible object abstractly in the first paragraph, then manifests it in the rectangular ribbon of the second. But this impossible object does have meaning. It is a mathematical entity in topology, an abstract entity in linguistic representation, but it is a real object—one that can be manifested, despite its paradoxical properties. And it has meaning. There is a place to hold on to its significance, and to expand our horizons to understand a word, and a world, that is logical in such a way

⁶⁰ Stein, *Tender Buttons*, 479.

that it is not always logical. Meaning is always spreading in *Tender Buttons*, but we are able to grasp it: “it means that if there is no place to hold there is no place to spread.”⁶¹

The final section of *Tender Buttons, Rooms*, emerges as a Klein bottle in its contrast to the other sections: there are no sub-titles or individual poems, *Rooms* contains only itself. The title suggests a treatise on space, and in it Stein explicitly tackles questions of measurement, volume, shape, relative positions of figures: the purview of geometry. Russell and Whitehead’s *Principia Mathematica* was originally devised as a four-volume project, with the fourth and final volume adding geometry to the logical system. Geometry had from antiquity enjoyed the status of a paradigmatic example of pure scientific thought, the most complete and axiomatic science, and had held a privileged place in the intersection of science and philosophy, especially in the early work of Russell. The fourth volume on geometry was to be written by Whitehead alone, incorporating into the logical scheme of the previous volumes the changes in the “new” geometry—which we can assume include changes posed by early quantum theory and other emerging fields like topology. Russell reflected later that Whitehead had succumbed to intellectual exhaustion: “after he had done a lot of the preliminary work, his interest flagged and he abandoned the enterprise for philosophy.”⁶² Whitehead’s work after his “philosophical turn” in the 1920s does not resemble “philosophy” as defined in terms of the *Principia*’s moment: his later work in process philosophy diverges significantly from his early work with Russell, where his “philosophy” resembles

⁶¹ *Ibid.*

⁶² Russell, *My Philosophical Development*, 75.

continental rather than analytic trends—dealing with psychology, experience, and metaphysics rather than logical statements and mathematics. Process philosophy embraces what classical ontology either denies or discounts: change and development.

Contrary to Aristotle's model of change as either accidental or anathema to identity, process philosophy recognizes change as the first principle of reality: identity as constituted by becoming, rather than of being. I leave reading *Tender Buttons* alongside Whitehead's process philosophy to another critic. It is noteworthy that Whitehead and Stein were great friends in their lifetimes, a friendship characterized by long walks and longer philosophical discussions. But they did not meet until 1914—after the completion of *Tender Buttons*, and long before Whitehead's 1929 *Process and Reality*.⁶³ But one wonders: did they speak of her novel, *The Making of Americans*, and his work with Russell, *The Principia Mathematica*? Did she share *Tender Buttons* with him?

A more fitting mathematical context for *Tender Buttons* would instead be the work of Poincaré's qualitative geometry, outlined in several papers between 1899 and 1904. The conceptual overlap between Stein's mathematical and logical engagements in her prose-poems and the ideas of topology are best seen in

⁶³ Stein and Toklas were introduced to Alfred North Whitehead and his wife Evelyn in July of 1914 in Cambridge. Later that same month they went to London to have dinner with the Whitheads and spent a weekend at their country home. While they were there, war was declared, and it was deemed inadvisable that they return to France for the time being; they stayed with the Whiteheads until the 17th of October. For more on this see Kate Fullbrook, "Encounters with Genius: Stein and Whitehead," in *Special Relationships: Anglo-American Affinities and Antagonisms 1854 – 1936*, eds. Janet Beer and Bridget Bennet (Manchester: Manchester University Press, 2002), 247.

comparison to early descriptions of the implications of topology, rather than the practical mathematics of topology that followed in the next decades. Poincaré's qualitative geometry—or “analysis situs,” an early name for topology—set itself up as an alternative to strictly metric understandings of space. Whereas metric geometry and projective geometry depend on measurement, distance, quantity, and the straight line, topological geometry rids mathematics of its over-dependence on measurement:

There is a third geometry in which quantity is completely excluded and which is purely qualitative: *analysis situs*. In this discipline two figures are equivalent every time it is possible to have one correspond to the other by means of a continuous deformation, whatever the law governing the deformation might be, provided the continuity is maintained. [. . .] Let us imagine a pattern of any kind and the copy is drawn by a clumsy draftsman. The proportions are distorted, straight lines drawn by a trembling hand have undergone distressing deviations and result in disproportional curves. From the point of view of metric geometry, and even from that of projective geometry the two figures are not equivalent; but on the contrary, they are equivalent from the point of view of *analysis situs* ⁶⁴

Topology offers a schema for understanding gradual change and continuous transformation of objects, gradients rather than rigid, fixed types, and spaces characterized by resemblances, neighborhoods, and closeness. This is a conceptual

⁶⁴ Henri Poincaré, *Mathematics and Science: Last Essays*, trans. John W. Bolduc (New York: Dover Publications, 1963), 25-26.

world which Russell and Whitehead declined to visit in their aborted fourth volume of the *Principia*, but it is the world in which *Rooms* seems to take place.

A few paragraphs into *Rooms*, Stein revisits some of the key images and concepts from *Objects* and *Food*, particularly measurement and orientation:

To begin the placing there is no wagon. There is no change lighter. It was done. And then the spreading, that was not accomplishing that needed standing and yet the time was not so difficult as they were not all in place. They had no change. They were not respected. They were that, they did it so much in the matter and this showed that that settlement was not condensed. It was spread there. Any change was in the ends of the centre. A heap was heavy. There was no change.⁶⁵

“To begin” as Stein writes, we find ourselves placed in space, perhaps a room. We may try to orient ourselves in this space by noting there is no wagon, and there is no light shining on the differences in the room, of the becomings around us (no “change lighter”), no visible, measurable process of change happening, because “it was done.” But as we study the scene, there is nevertheless the “spreading” of change and difference, even noting the stationary nature of the beings around (“that needed standing”). The change, difference, and ultimately being of objects here are determined, in large part, by how they are “respected”—that is, their relations in respect to one another. “They had no change” because “they were not respected.” Difference spreads into sameness in such a way that settlement of disparate objects, like we saw in the *Food* section with the ingestion of food into the speaker, the

⁶⁵ Stein, *Tender Buttons*, 498.

mixture of substances in a recipe into a dish, etc., into a condensed new form, that is how difference spreads into new being—how the system of objects can be “not unordered in resembling” as the difference spreads.

In her re-writing of the Sorites paradox in the opening of “ROASTBEEF”—“All the standards have steamers and all the curtains have bed linen and all the yellow has discrimination and all the circle has circling. This makes sand”—Stein parodies those paradoxes which arise out of trying to make a logical sequence out of gradual and continuous change (a single grain does not make a heap, if no grains of sand do not make a heap, then $n+1$ grains of sand do not make a heap, and thus no number of grains of sand can be said to constitute a heap). Her “all x have y ” parody of logic prefaces the conclusion in a vague, contradictory, heap of sand.

In *Rooms*, which opens with the oft-quoted imperative, “Act so that there is no use in a centre,” Stein claims that the “change” missing early on in our still-life has some relation to that center, “Any change was in the ends of the centre”—that is, we can only see the change, the becoming of being, if we ignore the center and look to the periphery (“the ends of the centre”), that is, not deny a center exists but *act* so that there is “no use” in it, hermeneutically.⁶⁶

“A heap was heavy. There was no change”—at the moment that the swirling differences and resemblances between objects condenses, when the spreading stops, when there is no change, that is when we get our definable, heavy, heap. But there is little truth to be found in this condensed heap, in being able to identify, say, how many grains of sand make a heap.

⁶⁶ *Ibid.*

What happens when we legislate being, in terms of difference and resemblance? Stein looks at this through the idea of a “lecture”:

To consider a lecture, to consider it well is so anxious and so much a charity and really supposing there is a grain and if a stubble every stubble is urgent, will there not be a chance of legality.⁶⁷

The Sorites paradox is most often demonstrated through two examples, that of the heap of sand, and that of baldness. As the thought experiment goes: would we describe a man with one single hair on his head as bald? Yes. Two hairs? Yes. Three? Probably. Continue for $n+1$ hairs on this allegedly bald man’s head. Where do we draw the line? For Stein, if we are really thinking this logic through, “really supposing there is a grain” and if there is stubble, or hair growth, and taking that hair growth very urgently, we are giving in to the “lectures” on being from analytical philosophy and legislating being, opening the door to the “chance of legality” in an otherwise un-policed system of becoming.

In *Rooms* Stein deliberates on the conjunction of logic with countability and infinity, the very problems that confront the Sorites paradox, Russell’s barber paradox, and the issue of the bald man:

The instance of there being more is an instance of more. The shadow is not shining in the way there is a black line. The truth has come. There is a disturbance. Trusting to the baker’s boy meant that there would be very

⁶⁷ *Ibid.*, 507.

much exchanging and anyway what is the use of a covering to a door. There is a use, they are double.⁶⁸

Exploring these paradoxes Stein nevertheless approaches “truth” in the way analytical philosophy attempts to: the “truth has come.” However, as soon as we land on a formalization of truth, there is a “disturbance” we need to incorporate into our theory. Once we recognize that “the instance of there being more is an instance of more”—that is, every addition, every instance of more, whether one grain of sand or something seemingly more substantial, changes a being. The being is more. But the difference between a handful of grains of sand and a heap cannot be quantified cleanly—that is, the slight definition, the “shadow” of being, “is not shining” (there is no “change lighter,” you’ll remember) and stark, not a strong contrast, not “in the way there is a black line” dividing something. That is to say, if we combine this with “a line just distinguishes it” we see how incremental change is significant, being is always becoming something else (the difference is spreading), but we cannot draw clean, clear boundaries around being. Especially in the presence of infinity, where change will always be $n+1$ or $n-1$. Our standards of measurement can lead us astray—that is, we might not want to trust “to the baker’s boy” in measuring our universe, and be constantly ready to exchange meanings and mark change. “What is the use of a covering to a door,” Stein asks. What is the use of closing the door on this paradox? There is a use, Stein later claims in *Rooms*, in “Lying in a conundrum.”⁶⁹ The use, as Stein writes, is “double” (“There is a use, they are double”)—paradoxes like the Sorites problem come in pairs. There are positive and

⁶⁸ *Ibid.*, 498.

⁶⁹ *Ibid.*, 503.

negative versions. If you reverse the predicate and flow of negation, you have two versions. One grain of sand doesn't make a heap, so $n+1$ grains of sand can never amount to a heap. If we grant there is a heap of sand ("the heap is heavy"), one grain of sand must make a heap, and thus, any number of grains does. All and any number of grains makes a heap. We are all bald or no one is bald. "Any little thing is water," Stein tells us later in *Rooms*, in one of her many statements which open up categories to all being, or make the vague concrete.⁷⁰ But we cannot become complacent in dwelling in radical incoherence—we must continue to try to give form to the vague, to help truth come: "Lying so makes the springs restless, lying so is a reduction, not lying so is arrangeable."⁷¹

Tender Buttons is filled with contradictions. But, as Stein writes in *Rooms*, "There is a contradiction and naturally returning there comes to be both sides and the centre."⁷² The center becomes, not so much the central, the focus, but the excluded middle. Here the center referred to is a specific center—a point between two specified sides, "both sides," the part of the continuum between contradictory elements such as bald or not-bald, heap and not-heap. Contradictions are natural. Contradiction is *logical*.

Logician, mathematician, and philosopher Kurt Gödel is perhaps the most well-known figure in the history of mathematics to admit that contradiction is a necessary part of mathematical systems. Gödel recognized how mathematics and logic necessarily produced forms like Möbius strips—strange loops and recursions

⁷⁰ *Ibid.*, 501.

⁷¹ *Ibid.*, 503.

⁷² *Ibid.*, 499.

in the symbolic systems expressing mathematical and logical truths. In the 1930s, Gödel would prove that Russell and Whitehead's system did not ultimately bridle in ambiguity by banishing self-reference. His "Incompleteness Theorem" claims, in plain language, that all consistent axiomatic formulations will include undecidable propositions. Gödel argued that any formal system complicated or interesting enough to prove its own consistency can do so if, and only if, it is inconsistent by demonstrating a highly technical, number theory version of "This statement is false." The "incompleteness" of Gödel's incompleteness theorem, refers to the necessity of any symbolic system based on deriving truth from axioms necessarily remaining incomplete.⁷³

As opposed to the cleanness of Euclid's five axioms, twentieth-century mathematicians like Gödel found that a complete system requires an infinite number of axioms—axioms created when the paradoxes of self-reference madly generate like a cancerous cell. Because symbolic systems we use to represent the universe are *part* of the universe, and our representations (even our cognition) of the universe are an example of the system modeling itself, there can never be a complete formal system, a complete representation, a complete understanding—it's the same problem as the problem of infinite sets, the problem of the self-referential paradox. The model is within the universe, in order to have a complete model, the universe would need to expand to contain it. It would have to be bigger than itself.

⁷³ Gödel's theorems are outlined in his 1931 paper, "On Formally Undecidable Propositions in *Principia Mathematica* and Related Systems I," reprinted in Van Jean Heijenoort, *From Frege to Gödel*, 592-618.

This leads to a logical recursion, an iterative string. The model models the universe. The universe includes the model. The model must then model itself. The model must model the model of itself. The model models the model modeling the model. This is what Gödel grasped when he found that handling unprovable theorems would create new theorems, which could not be proven, which would create new theorems, and so on, and so on. Gödel's findings profoundly changed the horizon of expectations for mathematics and philosophy; a total purity of language and consistency of form cannot be achieved. All systems are necessarily incomplete. But—and this is the point less often dwelled on by those who claim Gödel for postmodern theory, it is precisely this incompleteness that makes a system function; subtle ambiguities define a system *as* a system. Anything the least bit interesting, the least bit complex, anything formal (that is, not random), must contain paradoxes. For Russell and Whitehead, this problem was often pushed off on the vagaries of language. Gödel assigned numbers to the statements in the *Principia*, demonstrating that the necessary inconsistencies of axioms are not caused solely by a translation between pure mathematics and spoken expression.

Stein's many "discoveries" in pursuing the exactitude of mathematics in her poetry paralleled (and preceded) Gödel's. While *Tender Buttons* is more suggestive of the same conclusions as Gödel's, the kernel was already there in *The Making of Americans*. Stein similarly finds incompleteness when seeking totality, but also does not equate incompleteness with randomness or absolute contingency:

Sooner or later some one knowing this will know it of this one, in the
beginning of not being certain that the whole one is knowing is the whole of

that one is a strange feeling, not doubting, not puzzling, not baffling, just incompleteness⁷⁴

Stein's *Tender Buttons* is an extension of this idea: in it she inhabits contradiction and embraces the excluded middle, but while she revels in and represents "strange feeling," her axiomatic statements about identity are not "doubting, not puzzling, not baffling." Stein's commitment to the "exactitude of mathematics," I argue, is precisely an understanding that, as one pursues the exactness, one ferrets out, and must face, the ambiguity. Banishing inconsistency from logic shed a light on the very inconsistencies that undergirded it. Russell despaired; Gödel revealed. Like Gödel, Stein produces paradoxes in the pursuit of precision, but does not banish them like ghosts. They become part of what makes her system of representation more complete, more real.

As an "axiomatic modernist" Stein pursues order and exactitude. Stein's explorations, struggles, and outcomes are conversant with mathematicians, scientists, and philosophers in the early twentieth century—namely Cantor, Frege, Russell, Whitehead, and Gödel. These thinkers all encounter the strange irreducibility of being to axiom, the strange interactions of ordinary language and logical forms, and the paradoxes that arise from all attempts to logically structure the universe. Though they take this inquiry in different directions, each is a member of a modernist turn in mathematical thinking. Part of my purpose for drawing out the similarities between Stein's work, analytical logic, and the emerging mathematics at the advent of the twentieth century is to place, or re-place, Stein's

⁷⁴ Stein, *MA*, 357.

avant-garde mode in *Tender Buttons* squarely in a modernist moment. While richly compared to the visual art of her time, when Stein of the *Tender Buttons* mode is compared to philosophical and scientific contexts, her work is usually moved ahead on the twentieth-century timeline, and she is hailed as a postmodern thinker. By dwelling on the logic of Stein we can better account for her balancing the desire for logical totalities that marks modernity and the response to this impulse that marks modernism.

While on the one hand Stein is often hailed as the “mother of modernism,”⁷⁵ critics who devote significant time to her work most often draw comparisons from Stein’s poetics to the body of theory we call postmodernism. The conceptual difficulties of *Tender Buttons* have led critics to prioritize Stein’s linguistic playfulness, noting the way in which her language operates non-referentially and destabilizes linguistic systems. Approaching *Tender Buttons* through a post-structuralist lens, critics like Marriane DeKoven have provided compelling strategies for reading the text, but have preferred generalizations about Stein’s style and resisted interpretations of specific works or passages, noting that the content of passages in isolation is “generally arbitrary and often meaningless.”⁷⁶ Studies of

⁷⁵ Wendy Steiner notes some of the iterations of Stein as the “mother of modernism” and “mama of dada” in “Mother” (*London Review of Books*, 17.20 [19 October, 1995]: 23-24). Stein is also referred to as the “mother of modernism” in the entry on Stein in *Great American Writers: Twentieth Century Volume 5*, ed. by R. Baird Shuman (Tarrytown, New York: Marshall Cavendish Co., 2002), 1417. Sometimes this maternal reading of Stein can be dismissive: Bob Perelman refers to the “journalistic insult” of Stein as the “Mother Goose of Montparnasse” in *The Trouble with Genius: Reading Pound, Joyce, Stein, and Zukofsky* (Berkeley: University of California Press, 1994), 134.

⁷⁶ Marriane DeKoven, *A Different Language: Gertrude Stein’s Experimental Writing* (Madison, WI.: University of Wisconsin Press, 1983), xv. I generally agree with *parts*

Stein in this mode, such as the early work of DeKoven and that of Jane Bowers⁷⁷ have influenced scholars after them such as Ellen Berry, Michael Kaufmann, and Penelope Engelbrecht to view Stein's work in a post-modernist context rather than a modernist context.⁷⁸ Stein critics have, overwhelmingly, served up the wordplay and seeming illogic of *Tender Buttons* as the example of her postmodern technique.

These appropriations of Stein for postmodernism focus on her attack on logic and syntax as an example of the arbitrary and fluid nature of language. For example, Susan E. Hawkins claims that Stein

uses the logic of syntax against itself, not so much because she wishes to hide all sense and pleasure from her readers, but because she wishes us to see how arbitrary, how odd and silly our syntax—and hence propensity for logical constructions—frequently is.⁷⁹

Neil Schmitz argues that *Tender Buttons* demonstrates Stein's "prescience" of later postmodern style, attacking "the order of language" those "elements of syntax and

of DeKoven's statements about reading Stein's works, that is that "we cannot interpret any of them to form coherent, single, whole, closed, ordered, finite, sensible meanings" (5). While I agree that we cannot form *single* or *closed* meanings, I resist the pervasive argument that we cannot form "sensible" meanings.

⁷⁷ Jane P. Bowers, *"They Watch Me as They Watch This": Gertrude Stein's Metadrama*. Philadelphia, PA.: University of Pennsylvania Press, 1991.

⁷⁸ See particularly Ellen Berry, *Curved Thought and Textual Wandering: Gertrude Stein's Postmodernism* (Ann Arbor: Michigan University Press, 1992); Michael Kaufmann, *Textual Bodies: Modernism, Postmodernism, and Print* (Lewisburg, PA.: Bucknell University Press, 1994); and Penelope J. Engelbrecht, "'Lifting Belly is a Language': The Postmodern Lesbian Subject," *Feminist Studies* 16.1 (Spring, 1990): 85–114.

⁷⁹ Susan E. Hawkins, "Sneak Previews: Gertrude Stein's Syntax in *Tender Buttons*," in *Gertrude Stein and the Making of Literature*, eds. Shirley Neuman and Ira B. Nadel (Boston: Northeastern University Press, 1988), 122.

signification that provide philosophical and scientific discourse with its stability.”⁸⁰ Shari Benstock claims Stein challenged “the equation between sign and substance, form and meaning,” and “arrived at readings of language that have more recently been attributed to deconstructionist thought,” and that Stein “anticipated all the ways in which the sign could block rather than reveal meaning.”⁸¹

These studies are, in part, a reaction to content-based analyses of *Tender Buttons*, such as those of Cynthia Secor or Lisa Ruddick, who read Stein’s work as containing coded allegories of lesbian eroticism and a feminist critique of the roles given women in life and language.⁸² Benstock, for instance, argues that Stein’s homosexuality is the essential key to understanding the text, seeing her lesbianism as a “code” wherein “Once the code is broken, meaning spills out.”⁸³ Both allegorical and post-structuralist readings of *Tender Buttons* alight persuasively on meanings that inhere in the text. However, I want to supplement such readings with an examination of logic and mathematics in *Tender Buttons*—that is, the logical and positive statements within the text and not just their demonstration of the arbitrary nature of language and indeterminate nature of meaning. Stein’s recalcitrant realism, and her attempt to make the relationship between her words and the world

⁸⁰ Neil Schmitz, “Gertrude Stein as Post-Modernist: The Rhetoric of *Tender Buttons*,” *Journal of Modern Literature* 3.5 (July, 1974): 1217.

⁸¹ Shari Benstock, *Women of the Left Bank: Paris, 1900-1920* (Austin: University of Texas Press, 1986), 186.

⁸² See Lisa Ruddick, *Reading Gertrude Stein: Body, Text, Gnosis* (Ithaca: Cornell University Press: 1990); Cynthia Secor, “Gertrude Stein: The Complex Force of Her Femininity,” in *Women, the Arts, and the 1920s in Paris and New York*, eds. Kenneth W. Wheeler and Virginia Lee Lussier (New Brunswick, NJ.: Transaction Books, 1982), 27–35.

⁸³ Benstock, *Women of the Left Bank*, 161.

as exact as mathematics, do not support the claims that she “breaks entirely the assumed connection between word and world.”⁸⁴

Though *Tender Buttons* does show a sophisticated awareness of an unstable linguistic system, the “postmodern Stein” view potentially discounts her participation in a distinctly modernist framework. Though Stein, like the philosophers and mathematicians of her time, is starting to find the gaps in the naïve realism of philosophy, art, and science that came before her, her project in *Tender Buttons* is part of a modern questioning of the relationship between reality and abstraction, not to reject the mimetic mode, but to improve upon it. Postmodern readings of *Tender Buttons* tend to skip over the text’s experiments in trying to represent the material in a “realistic” way. On the contrary: *Tender Buttons*’ struggle to transform the material into words, to find a logic that can account for linguistic indeterminacy without being “random,” and to produce knowledge about objects and perception, is part of a modernist project in both the arts and sciences.

Though *Tender Buttons* strongly critiques logical categories, it goes beyond mere parody by consistently and productively using the language of analytical logic. Stein’s “part in killing the nineteenth century,” as she claimed in *Wars I Have Seen*, was carried out because the century was

completely lacking in logic, it had cosmic terms and hopes, and aspirations, and discoveries, and ideals but it had no logic, and I like logic I really do, I suppose that is the reason that I so naturally had my part in killing the

⁸⁴ *Ibid.*, 161.

nineteenth century and killing it dead, quite like a gangster with a mitraillette, if that is the same as a tommy gun.”⁸⁵

While Stein’s experimental poetics may seem to take a tommy gun to the classical paradigms of representation, in embracing the excluded middle and representing objects through topological transformations, she still privileges the logical, bending logic to her purposes, rather than breaking from the logical philosophy and mathematical practices of her time.

⁸⁵ Stein, *Wars I Have Seen*, 91.

Part II: Mathematics in Ezra Pound's Aesthetic and Social Theory

CHAPTER THREE

The Game and Play of Chess: Pound's Aesthetic Axioms

Axioms are the necessary platitudes of any science, and as all sciences must start from axioms, most serious beginnings are affairs sententious, and pedagogical, bear with me a little; let me write a few pages of commonplace, of things which we all know and upon which we for the most part agree, and if you endure to the end of them you will know upon what section of our common knowledge I am to build the airy fabric of my heresies¹

Thus opens the second installation of "I Gather the Limbs of Osiris," a didactic series of articles in 1912 on "The New Method" in scholarship by Ezra Pound.²

Pound's disclaimer presents the key aspect of the axiomatic as it emerges in literary, logical, and mathematical modernism—an entanglement of commonplace with heterodoxy. The goal of the axiomatic modernist is to produce statements governing formal systems of such exactness, rigor, and legitimacy that they can be recognized by others as unimpeachably true, *prima facie*; at the very same time, these modernist axioms necessarily detract from orthodox understandings of representation, interpretation, form, time, space, or matter; they are so categorically *new* as to be regarded (and indeed presented) as "heresies."

¹ Ezra Pound, "I Gather the Limbs of Osiris II: A Rather Dull Introduction," *New Age* 10.6 (7 December, 1911): 130-1; in *Ezra Pound's Poetry and Prose: Contributions to Periodicals Vol. I*, eds. Lea Baechler, A. Walton Litz, and James Longenbach (London: Garland Publishing, 1991), 44.

² Each article in the Osiris series appeared in *The New Age* with an editorial caption under the series title reading: "Under this heading Mr. Pound will contribute expositions and translations in illustration of 'The New Method' in scholarship.—THE EDITOR."

In outlining his “new method,” Pound presses the importance of “facts” drawn from literature and history. He is dismissive of the typical definition of facts in a literary-historical register, such as dates and other bits of historical data. “Any fact is, in a sense, ‘significant,’” he writes, “but certain facts give one a sudden insight into circumjacent conditions, into their causes, their effects, into sequence, and law.”³ These facts are literature’s “interpreting details,” which give form to experience and “govern knowledge as the switchboard governs an electric circuit.”⁴ Pound’s early poetic theory, in such texts as the “I Gather the Limbs of Osiris” series and *The Spirit of Romance*, present what Pound calls “significant data,”⁵ from which he extracts axioms for the laws of knowledge formation and for governing poetic expression.⁶

Like Stein, Whitehead, and Russell, Ezra Pound’s early poetic theory endeavors to develop consistent and logical systems which improve representation, just as his poetry attempts to produce works which can model social and scientific complexity in concrete terms. “Everyone, or nearly everyone,” writes Pound later in the “Osiris,” series, “feels at one time or another poetic, and falls to writing verses; but only that man who cares and believes really in the pint of truth that is in him will

³ Pound, “I Gather the Limbs of Osiris II,” 44.

⁴ *Ibid.*

⁵ *Ibid.*, 45.

⁶ Pound quickly replaces the term “axiom” (used in Osiris series I) with “luminous details” (used in series II and onward, as well as in *The Spirit of Romance*) as his term for the foundational principles which govern knowledge.

work, year in and year out, to find the perfect expression.”⁷ *Real* poetic technique, for Pound, is characterized by this search for perfection, “the means of conveying an exact impression of exactly what one means.”⁸ But, he writes:

When I say above that technique is the means of conveying an exact impression of exactly what one means, I do not by any means mean that poetry is to be stripped of any of its powers of vague suggestion. Our life is, in so far as it is worth living, made up in great part of things indefinite, impalpable; and it is precisely because the arts present us these things that we—humanity—cannot get on without the arts.⁹

For Pound, the poetic ideal is one in which the artist marries the “hyper-scientific precision”¹⁰ of mathematical discourse with the “powers of vague suggestion” of poetic media, in order to represent the seemingly indefinable, innumerable, and ineffable.¹¹ In his early prose, Pound attempts to supply poetic examples and define

⁷ Ezra Pound, “I Gather the Limbs of Osiris IX: On Technique,” *New Age* 10.13 (25 January, 1912): 297-9; in *Ezra Pound's Poetry and Prose: Contributions to Periodicals Vol. I*, 58.

⁸ *Ibid.*, 57.

⁹ *Ibid.*

¹⁰ Ezra Pound, *The Spirit of Romance* (New York: New Directions, 1968), 87. Hereafter denoted “SR.”

¹¹ For more of Pound’s meditations on the “ineffable and ineffable” see Ezra Pound, “Psychology and the Troubadours,” *Quest* 4.1 (October, 1912): 37-53; in *Ezra Pound's Poetry and Prose: Contributions to Periodicals Vol. I*, eds. Lea Baechler, A. Walton Litz, and James Longenbach (London: Garland Publishing, 1991), 95. For an account of the conflict between precise forms and vague forms in modern fiction, particularly Joyce and Woolf, see Megan M. Quigley, “Modern Novels and Vagueness” (*Modernism/modernity* 15.1 [January, 2008]: 101-129), which also includes an excellent précis of the philosophical debate about vagueness in Peirce, Wittgenstein, Frege, Russell, and others.

poetic methods that marry matters of fact with matters of concern, merging “the science of poetry” with “the wisdom of poetry.”¹²

In his quest to make empiricism and the abstract cohere, Pound borrows animating concepts from mathematics, particularly analytical geometry. In Pound’s writing, particularly before 1915, his struggle centers on the inadequacy of language to model aesthetic and emotional experiences of the individual in such a way that is direct, precise, and scientifically demonstrable. Pound’s work in this period favors formulas, equations, axioms, and other clean, crisp mathematical forms. He uses mathematical equations to label those aspects of art he deems scientifically demonstrable, to explain how poetry, like geometric statements, creates form, and uses scientific ideas to navigate and narrate the history of beauty.

In his first major publication, *The Spirit of Romance*, Ezra Pound writes: “the history of literary criticism is largely the history of a vain struggle to find a terminology which will define something.”¹³ Pound thus inserts his theory of poetry into the whole history of philosophy as the struggle of empiricism—that of finding a precise terminology for being, of matching language to the real. For Pound, poetry is more able than other uses of language to achieve this end. In his 1910 preface to *The Spirit of Romance*, Pound emphasizes that his “Attempt to Define Somewhat the Charm of the Pre-Renaissance Literature of Latin Europe,”¹⁴ though concerned with poetic language, is a distinctly different kind of study of literature from what has come before. The first words of the volume mark this point: “This book is not a

¹² These phrases will become clearer when we reach a discussion of Pound’s prose articles of these titles further on in this discussion.

¹³ Ezra Pound, *SR*, 13.

¹⁴ This is the full subtitle, used only in the first edition.

philological work.”¹⁵ Pound’s essays in *The Spirit of Romance* are meant to approach poetry outside of and beyond existing philological methods (philology being, for Pound, the combination of history, literary criticism, and linguistics which focuses on development and narrow historicism); Pound’s study does not “burden” itself with “the rags of morphology, epigraphy, *privatleben* and the kindred delights of the archaeological or ‘scholarly’ mind.”¹⁶ In his preface, philology is aligned with the sciences: “There are a number of sciences connected with the study of literature. There is in literature itself an Art, which is not, and never will be, a science.”¹⁷ There is a paradox associated with Pound’s linkage of philology and science which he was shortly to clarify. While on the one hand Pound’s earliest published prose work sets itself up against philology read as a “scientific” study of literature, on the other, *The Spirit of Romance*, and other prose works of Pound’s published in the teens, begin to articulate a theory of poetry paralleled with scientific discourses, in which poetry aligns with the scientific in terms of its relation to truth and knowledge.

Pound’s early career is characterized by use of a preponderance of scientific tropes and comparisons of poetry and science. He invokes a range of sciences rather than a particular science, and doesn’t claim either to hold particular mastery over a given branch of science or to understand fully even the particular discoveries or methodologies he invokes. In a 1915 letter to the editor at *New Age*, Pound aligns his lack of knowledge about the underlying psychology of Roman literature (a body of

¹⁵ Pound, *SR*, 5.

¹⁶ *Ibid.*

¹⁷ *Ibid.*

work he often translates, reworks, and alludes to) to his lack of knowledge about the fundamentals of the living world, the scientist's purview:

I do not pretend to understand the mind of Pyramus, neither can I explain why an electrical current generates pattern (demonstrable through certain instruments), nor why grass seed grows into grass (under certain conditions), nor why acorns grow into oaks, or why salt tastes salty¹⁸

What Pound does appear to be interested in in his early prose writings and experiments in Imagism are the perceivable patterns of that world—whether poetic, optic, electric, or natural—demonstrable/perceivable through “certain instruments”—whether the instruments that record electrical current, human senses, or poetic method. When Pound invokes *Science* with a big S, he tends to reference science as an empirical discipline, particularly a nineteenth-century materialist method, though at the same time he uses “empiric” to reference experience, that is, sensation and phenomena. In this way, Pound often conflates objective and subjective, finding that the “serious artist,” that is the poet, is empiric and scientific—able to convey the material real through capturing subjective experience in language.

The key here is that Pound's use of science throughout his essays in the early decades of the twentieth century on the whole does not emphasize science's subject matter or discoveries but its use of language—science's discursive method. Poetry and science are thus aligned for Pound in their methods of linguistic expression,

¹⁸ Ezra Pound, “Imagism” [letter to the editor], *New Age* 16.15 (11 February, 1915): 415, in *Ezra Pound's Poetry and Prose: Contributions to Periodicals Vol. II*, eds. Lea Baechler, A. Walton Litz, and James Longenbach (London: Garland, 1991), 18.

their preciseness, their parallel ability to move between the abstract and the concrete. Pound's poetic theories in his early writings emphasize directness and precision, and more often than not this method is compared to, modeled on, or explained through the examples of scientific disciplines: more precisely, the form of description and explanation that the sciences share—the language of mathematics.

“Poetry,” Pound writes in *The Spirit of Romance*, “is a sort of inspired mathematics, which gives us equations, not for abstract figures, triangles, spheres, and the like, but equations for human emotions.”¹⁹ Wedding human emotion to mathematical precision runs counter to commonplace understanding of both, but throughout Pound's work he will light upon the strange Janus-face of the “abstract”—describing, on the one hand, things that are difficult to grasp or make concrete, like subjective, human emotions, and on the other hand, enduring forms like spheres and angles, using a mathematical, even a Platonic register. This antithetical association of the subjective abstract (emotions, values, aesthetics) with the objective abstract (mathematical forms) can be found again in a parenthetical sentence tacked on to the very end of *The Spirit of Romance*, added in 1929, when Pound once again critiques the sternly philological scholar preoccupied with the comparative study of ancient languages:

In the end we probably come round to the view of the sound classic scholar, but classic scholarship has nevertheless produced or maintained a certain form of ignorance. I mean simply that if a man start with too good a knowledge of Greek and Latin masterwork he seldom has patience enough

¹⁹ Pound, *SR*, 14.

with mediaeval work to discover what it is all about. He misses the mediaeval values which are, after all, values, and he never understands in the least what the Renaissance was. There are a number of factors and equations which escape him completely.²⁰

The medieval and Renaissance “values” that Pound’s classic scholar misses are described as “factors and equations”—all three terms mathematical. The scholar misses the “values which are after all, values”—that is, “values” which are on the one hand principles or morals of a historical group *and* discoverable with the larger equations of culture, like algebraic terms within mathematical functions (x, y) or numerical measures of a physical quantity, an amount (1, 2, 10). The “number” of factors and equations escape this scholar who is not tuned, like Pound, to see the subjective “factors and equations” that poetry has rendered objectively bare like the factors and equations of mathematics. Thus “factors” must be read as both circumstances or elements of historical situations, but also as numbers among numbers interacting within an expression or product in mathematics. Similarly, equations for Pound, throughout *The Spirit of Romance*, may be read as statements of political, theoretical, aesthetic, historical, *and* mathematical variables. What is most precise and particular to these epochs, for Pound, is described in distinctly mathematical language. The values of the texts he analyzes are discernible through mathematical tools because they in some way behave according to mathematical laws.

²⁰ *Ibid.*, 239.

In the same year as *The Spirit of Romance*, Pound reviewed Hudson Maxim's book *The Science of Poetry and the Philosophy of Language*. In his rather unfavorable review, Pound nonetheless agrees with Maxim that poetry can be studied scientifically, or rather, that poetry is not unlike science in that it is subject to laws:

Mind you, poetry *does* admit of scientific analysis and discussion; it *is* subject to law and laws. Mr. Maxim is right in these regards, but he is no innovator; we have been analyzing art since the days of Aristotle. We have been formulating its laws with more clarity and insight. Poetry admits new and profounder explanations in the light of modern science, but Mr. Maxim has not contributed to the advance of this critical sciences; he has given us a high-school textbook on *rhetoric*.²¹

Pound was not kind to Maxim's book, writing, "The pretenses in the announcement for the book may have led certain people to read it for amusement's sake, but it is too dull to be even food for ridicule."²² A later 1912 essay in *The Forum*, "The Wisdom of Poetry," continues this reaction to Maxim, opening with an attack on "a book which was causing some clatter about a year ago, and which has been mercifully forgotten" which claimed "among other things less probable, that it presented the first 'scientific and satisfactory definition of poetry.'"²³ Pound continues to quote from Maxim's text (though it remains unnamed in the 1912

²¹ Ezra Pound, "The Science of Poetry [a Review of *The Science of Poetry and the Philosophy of Language* by Hudson Maxim]," *Book News Monthly* 29.4 (December, 1910): 282-83; in *Ezra Pound's Poetry and Prose Vol. I*, 41.

²² *Ibid.*

²³ Ezra Pound, "The Wisdom of Poetry," *Forum* XLVII.4 (April, 1912): 497-501; in *Ezra Pound's Poetry and Prose Vol. I*, 72.

essay) to demonstrate Maxim's ignorance of both poetry and science, referring to the author ironically as "our scientist."

Nonetheless, in his earlier 1910 review, Pound does suggest that the work has a valuable contribution. Pound highlights in his review Maxim's claim that poetry is "presented with the utmost economy of symbols" and is the "expression of thought by means only of the essentials of thought."²⁴ In Maxim's words, this new theory of poetry is one

based upon trope and the office performed by trope in giving us a clearer perception of thought, by expressing the unfamiliar, the abstract, the intangible, and the insensuous, in terms of the familiar, the concrete, the tangible and the sensuous, which are analogous to, or in some way resemble or suggest, the things they are made to symbolize, thereby expressing in terms of experience thoughts lying outside experience: Poetry is the expression of insensuous thought in sensuous terms by artistic trope and the dignifications of thought by analogically articulated imagery. [. . .] Poetry transforms the abstract to the concrete, the intangible to the tangible²⁵

Despite his re-quoting part of this in "The Wisdom of Poetry" in order to lambast it, Pound actually borrows Maxim's notion that poetry makes the abstract concrete throughout his own prose writing on poetry.

Pound goes even further to suggest that Maxim should have used the example of analytical geometry to make this point about poetry's unique

²⁴ Pound, "The Science of Poetry," 41.

²⁵ Hudson Maxim, *The Science of Poetry and the Philosophy of Language* (London: Funk and Wagnalls, 1910), 37.

relationship to symbols, economy, and the expression of essentials. Pound quotes Maxim's claim that "poetry is the expression of imaginative thought by means only of the essentials of thought" and comments:

This much of the definition, however, applies to painting, sculpture, and the equations of analytical geometry. Maxim's definition is, however, further qualified to exclude, I think, for most people, the equations of analytical geometry, which equations are, however, much nearer to poetry in their essential nature than anything Mr. Maxim succeeds in defining, and it seems strange that a scientist should not have noted the kinship. I suspect that the noted chemist is as little a mathematician as he is master of English.²⁶

Analytical geometry appears again in the *Forum* piece of 1912, which offers Pound's own theory of the parallels between the geometer and the poet. He writes, "What the analytical geometer does for space and form, the poet does for the states of consciousness."²⁷ The poet and the scientist, here an abstract mathematician, or, later in the same essay, the "engineer, understanding and translating to the many," share a communication strategy—the ability to translate the particular into the general, into a "formula" as Pound writes, "unbounded by the accidents of time and place."²⁸ For Pound, poetry and science share a common discursive practice, that is, to distill at the same time as to suggest. For Pound, distilling the swirling multitude of phenomena into a concrete image, at one and the same time isolates specific details (the particular) while suggesting the whole (the general). In the same way,

²⁶ Pound, "The Science of Poetry," 41.

²⁷ Pound, "The Wisdom of Poetry," 75.

²⁸ *Ibid.*

scientific practice isolates the fundamental into a simplified formula that can then model a larger universe of forces. In the months immediately following publication of this essay establishing parallels between the analytical and the poetic, Pound would spend the summer with H.D. and Richard Aldington, and the three would give a name—Imagism—to a poetic practice modeled on the directness and economy of analytical analogy, Japanese poetry, and Chinese characters.

Writing about Chinese poetry in 1918, Pound likens the directness and economy of Imagism to Chinese poetry, and each to a “mathematical process of reduction”:

It is because Chinese poetry has certain qualities of vivid presentation; and because certain Chinese poets have been content to set forth their matter without moralizing and without comment that one labours to make a translation [. . .] everything is there, not merely by ‘suggestion’ but by a sort of mathematical process of reduction²⁹

This process of reduction appears in an earlier Pound piece, his 1914 “Vorticism” essay, where he narrates the origin of “In a Station of the Metro,” and describes its impetus as an “equation” and a “pattern”:

Three years ago in Paris I got out of a “metro” train at La Concorde, and saw suddenly a beautiful face, and then another and another, and then a beautiful child’s face, and then another beautiful woman, and I tried all that day to find words for what this had meant to me, and I could not find any words that seemed to me worthy, or as lovely as that sudden emotion. And that evening,

²⁹ Ezra Pound, “Chinese Poetry,” in *Early Writings: Poems and Prose* (New York: Penguin, 2005), 297.

as I went home along the Rue Raynouard, I was still trying and I found, suddenly, the expression. I do not mean that I found words, *but there came an equation . . .* not in speech, but in little splotches of color. It was just that—a “pattern”³⁰

Pound explains that this pattern needed refining, that the data in series (“another and another”) could be reduced and expressed in a shorter equation. The pared-down equation did not immediately come into crystalized language for Pound. He admits that he initially wrote a thirty-line poem but “destroyed it,” then six months later attempted the poem again, halving the poem’s length.³¹ A year afterward, Pound came up with his “*hokku*-like sentence.”³² Pound reduces the image, which originally inhabited thirty lines, to only two lines (and even the title is omitted in his reprinting of the poem in the “Vorticism” essay). The 1913 poem is printed in the “Vorticism” essay thus:

“The apparition of these faces in the crowd :

Petals, on a wet, black bough.”³³

The term “apparition,” indicates a startling or unexpected appearance, an appearance as if *ex nihilo*, of the invisible suddenly made visible, or the appearance of an immaterial or spectral being. The apparition is the image *par excellence*, in that

³⁰ Ezra Pound, “Vorticism,” *Fortnightly Review* 96 (1914): 461-471. Reprinted in Ezra Pound, *Gaudier-Brzeska: A Memoir* (New York: John Lane Company, 1916), 100. Ellipses in the original; emphasis mine.

³¹ *Ibid.*, 103.

³² *Ibid.*

³³ *Ibid.* Note that this is a reprinting of the poem with different spacing and punctuation than the original, printed in *Poetry* in 1913. This appears to be the only printing in which Pound adds an additional comma after “petals.”

each is an “intellectual and emotional complex in an instant of time.”³⁴ Using “the apparition” in the first line immediately establishes the fundamental status of the viewed object *as viewed* in time, a specific data point. As in the use of “apparition” in these lines from Shakespeare’s *Julius Caesar*—“I think it is the weakness of mine eyes / That shape this monstrous apparition”—Pound uses “apparition” to indicate the radical subjectivity of the image as “shaped” by the subject’s viewing of it.³⁵ Explaining his precise definition of the image in the “Vorticism” essay, Pound writes that “An *image*, in our sense, is real because we know it directly. [. . .] It is our affair to render the *image* as we have perceived or conceived it.”³⁶ Pound understands Imagist poetry to be answering a scientific problem—how does one move the object from one subject’s consciousness through language and into the consciousness of another? “In a Station of the Metro” as an Imagist poem demonstrates that representation depends on a radical subjectivity, that the viewer shapes the object viewed, and that the image is “real” and directly known only through the perceiving instrument, here the poet’s eyes or consciousness.

Nevertheless this complex process goes through a mathematical reduction following the principle of the axiom: to move from the particular (radical subjectivity) to the general (representation to the consciousness of another), Pound needs to reduce the data of experience to a fundamental, axiomatic statement. To accomplish this, Pound uses two lines and two images: the faces in the crowd and the petals on a bough. Before giving us his “one image poem” in the “Vorticism”

³⁴ Ezra Pound, “A Few Don’ts by an Imagiste,” *Poetry* 1.6 (March, 1913): 200.

³⁵ William Shakespeare, *Julius Caesar* (Boston: Ginn & Company Publishers, 1904), 1.3, 152.

³⁶ Pound, “Vorticism,” 99.

essay, Pound gives two examples of Japanese *hokku*. Like his explanation of the stimulus for “In a Station of the Metro,” his second example cites the event, the experience prompting the poem and the subsequent composition, in this case an event witnessed by his friend Victor Plarr as he walked through the snow with a Japanese Naval officer, the author of the spontaneous poem:

“The footsteps of the cat upon the snow :

(are like) plum-blossoms.”³⁷

Pound adds immediately after quoting the poem: “the words ‘are like’ would not occur in the original, but I add them for clarity.”³⁸ The plum blossom poem appears in between a “very well-known” Japanese *hokku*—“The fallen blossom flies back to its branch : / A butterfly.”—and Pound’s own. The butterfly poem does not include “(are like)” but follows the same format. In each there are two lines, separated by a line break, a colon and an indentation in the second line. Thus in these three poems Pound provides us with the translation for his use of a typographical symbol—a colon indicates “are like.” “Are like” sets up the comparison, but the colon, a mathematical symbol which denotes the relationship of a ratio or analogy, is more powerful on its own, which is why “are like” is added for clarity in Pound’s explication of the poems, but does not appear in the poems themselves. In the essay he will explain that the two lines of each poem work by super-position, “that is to say, it is one idea set on top of another.”³⁹ One needs to define the two lines in relationship to each other, to establish that the footprints of a cat in the snow are to

³⁷ *Ibid.*, 102.

³⁸ *Ibid.*, 103.

³⁹ *Ibid.*

the visual imagination as plum-blossoms are. The two ideas, footprints and plum-blossoms, are “set on top” of one another; they are layered, put into contact, and not simply horizontally set in relation. In this way the two ideas intersect with each other to produce a “one image” poem. The equation is this: two images to one, two lines in one “*hokku*-like sentence,” a pattern (that is, at least two data points) to a single equation governing that pattern.

Though he would likely bristle at the idea, Pound’s poem perfectly performs Herbert Maxim’s “theory” of the science of poetry, that is, “the dignifications of thought by analogically articulated imagery.”⁴⁰ The pattern Pound establishes works precisely by this kind of analytical analogy. Footsteps (are like) plum blossoms as faces (are like) petals, or, more analytically:

Footsteps : Plum Blossoms :: Faces : Petals

We must recall Pound’s use of the language of the analogy in his piece on Maxim, “The Wisdom of Poetry,” in 1912: “As the abstract mathematician is to science so is the poet to the world’s consciousness,”⁴¹ or:

Abstract Mathematician: Science :: Poet : World’s Consciousness

In that same passage, importantly the final lines of Pound’s essay, he offers an extended comparison using mathematical equations:

By the signs $a^2 + b^2 = c^2$, I imply the circle. By $(a - r)^2 + (b - r)^2 = (c - r)^2$, I imply the circle and its mode of birth. I am led from the consideration of the particular circles formed by my ink-well and my table-rim, to the contemplation of the circle absolute, its law; the circle free in all space,

⁴⁰ Maxim, *The Science of Poetry*, 37.

⁴¹ Pound, “The Wisdom of Poetry,” 75.

unbounded, loosed from the accidents of time and place. [. . .] As the abstract mathematician is to science so is the poet to the world's consciousness. Neither has a direct contact with the many, neither of them is superhuman or arrives at his utility through occult and inexplicable ways. Both are scientifically demonstrable.⁴²

Note that though the equation governs any number of particular circles, Pound is most interested in this passage in the singular "circle absolute" unbounded from the particular (time, space, material, iteration). This circle is the circle of Euclid's third axiom, the circle of Pythagoras: all possible circles crystallized into one Platonic, axiomatic image of the circle. The introduction of the equation of the circle in 1912 leads us to Imagism and Pound's most axiomatic mode: that of the mathematical reduction of representation to Imagist "equations." The "Vorticism" essay two years later will repeat this meditation on the equation governing the circle very closely but with some crucial differences. The passages are nearly parallel:

Thus, we learn that the equation $(x-a)^2+(y-b)^2=r^2$ governs the circle. It is the circle. It is not a particular circle, it is any circle and all circles. It is nothing that is not a circle. It is the circle free of space and time limits. It is the universal, existing in perfection, in freedom from space and time.

Mathematics is dull ditchwater until one reaches analytics. But in analytics we come upon a new way of dealing with form. It is in this way that art handles life. The difference between art and analytical geometry is the difference of subject-matter only. Art is more interesting in proportion as life

⁴² *Ibid.*

and the human consciousness are more complex and more interesting than forms and numbers.⁴³

Vorticism, as an evolution of Imagism, adds this final, important qualification. The analogy is weighted differently, the “proportion” varies between the elements. While in Imagism the main mathematical mechanism is one of reduction, from a set of data to an equation or axiom, Vorticism attempts to capture mathematically a more complex mechanics. The “image” remains the primary axiom of the Vorticist mode, but builds from it a more dynamic system. Between 1912 and 1914 Pound’s recognition that “Art is more interesting in proportion as life and the human consciousness are more complex and more interesting than forms and numbers” leads him to look for new models for his mathematical treatment of the poetic.

Pound’s commitment to a language system that could model the force and vitality of things in a way that could go beyond what he perceived as the arbitrary nature of “Basic English,” attracted him both to analytical geometry and to Chinese characters.⁴⁴ In 1913, Pound received the notebooks of American sinologist Ernest Fenollosa, who had died five years earlier. In 1919, he would publish Fenollosa’s essay, “The Chinese Written Character as a Medium for Poetry”⁴⁵ and he used the tenets of the piece as his own manifesto of sorts throughout the later half of the teens. In his foreword, Pound allies Fenollosa’s scholarship to his own in an echo of

⁴³ Pound, “Vorticism,” 105-106.

⁴⁴ Ezra Pound, “Foreword,” in Ernest Fenollosa, *The Chinese Written Character as a Medium for Poetry, An Ars Poetica with a Foreword and Notes by Ezra Pound* (London: Stanley Nott, 1936), 5.

⁴⁵ Pound published the essay in four installments in the *Little Review* in 1919, as part of *Instigations* in 1920, and as a stand-alone book in 1936 (my references are to the 1936 edition).

the beginning of his *The Spirit of Romance*: “We have here not a bare philological discussion, but a study of the fundamentals of all aesthetics.”⁴⁶ Fenollosa superficially appears at odds with Pound to the extent that mathematics does not appear favorably in *The Chinese Written Character*. But Pound more fundamentally shares Fenollosa’s emphasis on the primary significance of things, not abstractions. As Fenollosa writes, “Chinese notation is something much more than arbitrary symbols,” whereas “in the algebraic figure and in the spoken word there is no natural connection between thing and sign: all depends on sheer convention.”⁴⁷ Mathematics appears more aligned with logic in Fenollosa’s text, and logic is Fenollosa’s chief foe in illuminating the true poetic possibilities of the ideogram.

Logicians, to Fenollosa, care only for the sentence as the unit of analysis, particularly the sentence created by the “copula”—generally a subject and predicate connected by the verb “is.” The logician, Fenollosa writes, “finds it convenient to store his mind with long lists of nouns and adjectives, for these are naturally the names of classes [. . .] The study of verbs is meagre, for in such a system there is only one real working verb, to wit, the quasi-verb ‘is.’”⁴⁸ “Professional grammarians” and logicians are too invested in the completeness and the verification of a sentence’s truth or falsity, while in “nature there is *no* completeness.”⁴⁹ “All processes in nature are interrelated” and “continuous,” Fenollosa claims, and “thus there could be no complete sentence (according to this definition) save one which it

⁴⁶ Pound, “Foreword,” 7.

⁴⁷ Ernest Fenollosa, *The Chinese Written Character as a Medium for Poetry, An Ars Poetica with a Foreword and Notes by Ezra Pound* (London: Stanley Nott, 1936), 12.

⁴⁸ *Ibid.*, 30-31.

⁴⁹ *Ibid.*, 15.

would take all time to pronounce.”⁵⁰ In his zeal for the complete, definable, logically coherent unit, with a reliance on the “to be” verb rather than verbs of specific function, the logician neglects the actual things. Fenollosa demonstrates this neglect by “useless logic” in the metaphor of the chessboard:

According to this logic, thought deals with abstractions, concepts drawn out of things by a sifting process. These logicians never inquired how the ‘qualities’ which they pulled out of things came to be there. The truth of all their little checker-board juggling depended upon the natural order by which these powers or properties or qualities were folded in concrete things, yet they despised the ‘thing’ as a mere ‘particular,’ or pawn.⁵¹

This “discredited” logic is contrasted to “valid scientific thoughts” which follow “closely as may be the actual and entangled lines of force as they pulse through things. Thought deals with no bloodless concepts but watches *things move* under its microscope.”⁵² “Things” for Fenollosa reappear as pawns again later in *The Chinese Written Character* when Fenollosa claims that in the “inveterate logic of classification” (a “system” which could not “represent change” or “any kind of growth,” and blocked, in fact, the “concept of evolution” coming to Europe) things were “only so many particulars or pawns.”⁵³ Immediately following that statement, Fenollosa’s separation of logic and science is apparent: “Science fought till she got at the things.”⁵⁴ He continues: “She has discovered how functions cohere in things. She

⁵⁰ *Ibid.*

⁵¹ *Ibid.*, 15-16.

⁵² *Ibid.*, 16.

⁵³ *Ibid.*, 31.

⁵⁴ *Ibid.*

expresses her results in grouped sentences which embody no nouns or adjectives but verbs of special character.”⁵⁵ This shift from *logic* to *science* gives us, instead of long lists and tables of nouns and descriptive adjectives, the real “true formula for thought” according to Fenollosa, an idea that is echoed in much of Pound’s poetry: “The true formula for thought is: The cherry tree is all that it does.”⁵⁶

For Fenollosa, logic cannot acknowledge the action and evolution of things, but science and poetry can:

In diction and in grammatical form science is utterly opposed to logic.

Primitive men who created language agreed with science and not with logic.

Logic has abused the language which they left to her mercy. Poetry aligns with science and not with logic.⁵⁷

These two allied discourses, science and poetry, deal with the function, movement, and energy of things, and the alleged deep structural roots of the Chinese character in these actions and interactions is what draws Fenollosa and Pound to them. It is not hard to see Pound’s poetic method of the teens and twenties as an answer to Fenollosa’s call for poetry to engage the energy of things:

We need in poetry thousands of active words, each doing its utmost to show forth the motive and vital forces. We cannot exhibit the wealth of nature by mere summation, by the piling of sentences. Poetic thought works by suggestion, crowding maximum meaning into the single phrase pregnant, charged, and luminous from within. In the Chinese character each word

⁵⁵ *Ibid.*

⁵⁶ *Ibid.*, 32.

⁵⁷ *Ibid.*

accumulated this sort of energy in itself⁵⁸

Fenollosa's emphasis on the energy of words would profoundly influence Pound, and Fenollosa's papers would provide much of the language for Pound's articulation of Vorticism. In his essays and comments on Vorticism, Pound builds from his earlier, pre-Fenollosa foundational axiom of the image, described in 1913's "A Few Don'ts by an Imagiste" as "an emotional and intellectual complex in an instant of time"⁵⁹ to the more dynamic mechanics of the Vortex, which he would describe in the 1914 "Vorticism" essay as "a radiant node or cluster."⁶⁰ This language is borrowed directly from Fenollosa, whose essay "The Nature of Fine Art" speaks of words "charged with intense meaning at the center, like a nucleus, and then radiating out toward infinity, like a great nebula."⁶¹ In both "Vortex" and "Vorticism," Pound conflates image and vortex, in an evolution of his imagist theory:

THE IMAGE IS NOT an idea. It is a radiant node or cluster; it is what I can, and must perforce, call a VORTEX, from which, and through which, and into which, ideas are constantly rushing. In decency one can only call it a VORTEX.⁶²

At the same time, Pound sets image and vortex into relation, claiming that the

⁵⁸ *Ibid.*

⁵⁹ Strangely, Pound quotes himself, from "A Few Don'ts," in the "Vorticism" essay, but in the passive voice, as if the line comes from some other authority: "The image has been defined as 'that which presents an intellectual and emotional complex in an instant of time'" ("Vorticism," 99).

⁶⁰ Pound, "Vorticism," 106.

⁶¹ Ernest Fenollosa, "The Nature of Fine Art [I]," *Lotos* 9 (April 1896), 756. Quoted in K. K. Ruthven, *A Guide to Ezra Pound's Personae, 1926* (Berkeley: University of California Press, 1969), 16.

⁶² *Ibid.*

Vorticist poet's "primary pigment" is the image.⁶³ The image is thus the fundamental equation to the mechanics of the vortex: equations, writes Pound, "cause form to come into being. By the 'image' I mean such an equation."⁶⁴

The crystalline image as an instant of perception that characterizes "In a Station of the Metro" is extended into the mechanics of the vortex, like a theorem based on the axiom, whereby the poet and poem are not simply recording impressions but directing energy flows:

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 used in a text book of MECHANICS.

You may think of man as that toward which perception moves,

You may think of him as the TOY of circumstance, as the plastic substance RECEIVING impressions.

OR you may think of him as DIRECTING a certain fluid force against

circumstance, as CONCEIVING instead of merely observing and reflecting.⁶⁵

If "In a Station of the Metro" is a paradigm poem for Imagism and its reductive mode, Pound's 1915 poem, "Dogmatic Statement on the Game and Play of Chess (Theme for a Series of Pictures)"⁶⁶ is the paradigm poem in Pound's canon for poetic

⁶³ Ezra Pound, "Vortex," *BLAST: Review of the Great English Vortex I* (June, 1914): 153-154; Pound, "Vorticism," 102.

⁶⁴ Pound, "Vorticism," 106.

⁶⁵ Pound, "Vortex," 153.

⁶⁶ "Dogmatic Statement Concerning the Game of Chess: Theme for a Series of Pictures" first appeared in the March 1915 volume of *Poetry* (5.6) in a sequence of poems by Pound occupying the opening pages (paginated 251-261). The second

Vorticism. With fourteen⁶⁷ lines to “Metro’s” two, “Dogmatic Statement” attempts to capture, instead of one image, a process. Like Wyndham Lewis’s and Edward Wadsworth’s paintings which fill the Vorticist journal *BLAST*, the poem attempts to capture swirling energy on a synchronic canvas, here the chessboard.

“Dogmatic Statement” provides an apt case study for the evolution of Pound’s poetics from Imagism to Vorticism. At the same time, and on a far larger scale, Pound’s poem participates in the broader linguistic turn of the early twentieth century, associated with figures like Ferdinand de Saussure, when linguists and philosophers, as well as mathematicians and logicians, began questioning the most basic assumptions (indeed the axioms) held about language, particularly the belief that language was a transparent medium for thought. Many thinkers of Pound’s era struggled with the limits of linguistic determinacy and the ambiguity of any language, even mathematical, questioning the relation of statements, or propositions, to the “facts” of the world. This shift arguably began in the late nineteenth century with Gottlob Frege’s 1884 *The Foundations of Arithmetic*, the precursor to Russell and Whitehead’s *Principia* and Wittgenstein’s *Tractatus*, all of which significantly shifted analytical philosophy toward investigating the

printing (with adjusted title, “Dogmatic Statement on the Game and Play of Chess [Theme for a Series of Pictures]”) followed very closely in the July 1915 volume of *BLAST*. I will contend in Chapter Four that the poem was composed specifically for *BLAST* II. For this reason, I will be quoting from the version of the title and the version of the text from *BLAST* II, rather than the first printing, in both this chapter and the next.

⁶⁷ While the line breaks are consistent, the capitalization of indented lines varies from version to version of the poem. The poem’s 14 literal lines could be grouped via punctuation and lack of second line capitalization to make the poem only 10 line-units.

philosophy of language.⁶⁸ The use of ordinary language in connecting logic to mathematics caused problems for axiomatizing mathematics precisely because of the instability of linguistic expression, as we saw in Chapters One and Two, particularly in Russell's paradox, which highlighted the problem inherent in allocating truth or falsity to self-referential statements. While much of the "everyday mathematics" of formulas and equations were not necessarily interrupted by this roadblock, the philosophy of mathematics was at an impasse. Russell, Frege, and others encountered difficulty axiomatizing set theory and wedding logic and mathematics because of this difficulty in assigning truth to a language system. They needed to deal with the limits, and indeed probe the possibilities, of language systems. This investigation was ongoing in linguistics, particularly in the work of de Saussure.

Writing at the same moment that these figures are questioning the relationship between language, mathematics, and philosophy, Pound's poem stages Vorticism's changing of the creative paradigm by exploring the potential of linguistic forms through mathematical forms. In "Dogmatic Statement," Pound's ur-poem for the accomplishments of literary Vorticism, he turns to many of Fenollosa's images and claims, re-casting mathematics and chess as animating concepts for poetic

⁶⁸ We will return to Frege's *The Foundations of Arithmetic* in Chapter Five. It could be worthwhile to think about Frege's earlier work, the 1879 *Begriffsschrift*—subtitled *A Formula Language, Modeled Upon That of Arithmetic, for Pure Thought*—alongside Imagism. Pound's ideogrammic method has some resonance with Frege's "ideography," the "formula language" whose chief aim was to represent only the "conceptual content" and avoid ambiguity, and, much like Pound's Imagism, any rhetorical excess (*Begriffsschrift*, in Jean Van Heijenoort, *From Frege to Godel: A Sourcebook in Mathematical Logic 1879-1931*, [Cambridge, MA: Harvard University Press, 1967], 6-7).

representation rather than as its antitheses. Pound revitalizes the algebraic symbol, the “pawn,” and “checker-board” maligned in Fenollosa’s treatise, demonstrating the creative potential of the English sign-system as well as the creative potential in a game of chess. He boosts the revolutionary prestige of his experiment with language by mapping his poem’s internal shift from rigidity to fluidity onto the recent and ongoing paradigm shift in mathematics from Euclidean geometry to non-Euclidean geometry.

For Pound, Fenollosa’s work represented a major paradigm shift in the treatment of language. Pound praised him highly, calling him a “forerunner without knowing it.”⁶⁹ In *Of Grammatology*, Jacques Derrida cites Pound and Fenollosa’s commitment to an “irreducibly graphic poetics” as participating in “the first break in the most entrenched Western tradition” of logocentrism—that is privileging speech (phonocentrism) as the locus of meaning and writing as a secondary form of representation, not capable of the same amount of presence.⁷⁰ Derrida locates logocentrism in the uncritical belief that meaning inheres in our spoken words, and the assumptions and expectations we have for written language to be phonetic, to shadow speech and thus to carry on the “inherent” meaning, however decreased in translation. Graphic languages de-center this phonocentrism, highlighting the possibility that our abstract symbols do not uncomplicatedly approximate our meanings. Derrida points out that “we have known for a long time” about the “nonphonetic scripts” like Chinese and Japanese, and also known, for presumably as

⁶⁹ Pound, “Foreword,” 7.

⁷⁰ Jacques Derrida, *Of Grammatology*, trans. Gayatri Chakravorty Spivak (Baltimore, MD: Johns Hopkins University Press, 1997), 92.

long, that there actually are phonetic elements to such character systems.⁷¹ But Derrida affords Pound's fascination with the Chinese ideogram "historical significance" because Pound's Imagist and Vorticist poetics witness a paradigm shift within the Western tradition, part of an overall linguistic turn in modernist poetics which brings to the fore the aesthetic, abstract, and non-natural nature of linguistic signs.⁷² Indeed the irreducible poetics of the ideogrammic method, according to Pound, would qualify it as anti-logocentric. As Pound claims in *ABC of Reading*, "a language written in this way simply HAD TO STAY POETIC; simply couldn't help being and staying poetic."⁷³

Though Pound could not have known it at the time, the foremost figure in twentieth-century linguistics, Ferdinand de Saussure, would also use the chess metaphor in order to advocate for a change in the way we view language. Saussure's *Course in General Linguistics*, delivered as lectures between 1906 and 1911 but unpublished until 1916, opens much like *The Spirit of Romance* and *The Chinese Written Character*. Saussure explains that he is dissatisfied with the current state of the study of language, dominated by the philological method of historians, grammarians, and comparativists. Saussure attempts to "[place] linguistics on its true axis."⁷⁴ He identifies two axes of linguistic study—the synchronic axis in which language is studied as a system at a given point in time (called the "axis of simultaneities" and labeled as the AB axis), and the diachronic axis in which

⁷¹ *Ibid.*, 90.

⁷² *Ibid.*, 92.

⁷³ Pound, *ABC of Reading*, 22.

⁷⁴ Ferdinand de Saussure, *Course in General Linguistics*, trans. Wade Baskin (New York: Philosophical Library, 1959), 76.

language is studied in historical development (called the “axis of successions” and labeled as the CD axis).⁷⁵ In the synchronic axis, the study of language is devoted to the internal workings of language as a system, rather than external elements like evolution of dialects or transfer from geographical locations. Saussure uses a chess metaphor throughout, comparing the linguistic system to the game. He writes:

But of all the comparison that might be imagined, the most fruitful is the one that might be drawn between the functioning of language and a game of chess. In both instances we are confronted with a system of values and their observable modifications. A game of chess is like an artificial realization of what language offers in a natural form.⁷⁶

Each of his various groundbreaking theories correspond to a characteristic of chess. For instance, he explains the distinction between the external and internal study of linguistics by comparing it to chess:

Language is a system that has its own arrangement. Comparison with chess will bring out the point. In chess, what is external can be separated relatively easily from what is internal. The fact that the game passed from Persia to Europe is external; against that, everything having to do with its system and rules is internal. If I use ivory chessmen instead of wooden ones, the change has no effect on the system, but if I decrease or increase the number of chessmen, this change has profound effect on the “grammar” of the game.⁷⁷

And he similarly explains the difference between synchrony and diachrony:

⁷⁵ *Ibid.*, 80.

⁷⁶ *Ibid.*, 88.

⁷⁷ *Ibid.*, 22-3.

In a game of chess any particular position has the unique characteristic of being freed from all antecedent positions; the route used in arriving there makes absolutely no difference; one who has followed the entire match has no advantage over the curious party who comes up at a critical moment to inspect the state of the game; to describe its arrangement, it is perfectly useless to recall what just happened ten seconds previously. All this is equally applicable to language and sharpens the radical distinction between diachrony and synchrony. Speaking operates only on a language-state, and the changes that intervene between states have no place in either state.⁷⁸

Another of Saussure's major propositions is the arbitrary nature of the sign. In the system of language, he argues, signs have no inherent meaning; rather meaning is determined by difference. This corresponds, he explains, to the way pieces work in chess:

a state of the set of chessmen corresponds closely to a state of language. The respective value of the pieces depends on their position on the chessboard just as each linguistic term derives its value from its opposition to all the other terms.⁷⁹

Saussure splits language into two terms: "langue" and "parole." "Parole" is speech spoken by a given individual speaker, and "langue" is language as a system, with rules, categories, and limits on its intelligibility or ability to transfer meaning between speakers. One can say anything in "parole," but the ability to mean something depends on "langue." That said, even with rules and limits imposed on

⁷⁸ *Ibid.*, 88.

⁷⁹ *Ibid.*

the system of language, as in the game of chess, the way one can greatly affect the meaning that is produced:

In each play only one chesspiece is moved; in the same way in language, changes affect only isolated elements.

In spite of that, the move has a repercussion on the whole system; it is impossible for the player to foresee exactly the extent of the effect. Resulting changes of the value will be, according to the circumstances, either nil, very serious, or of average importance. A certain move can revolutionize the whole game and even affect pieces that are not immediately involved. We have just seen that exactly the same holds for language.⁸⁰

Though in contrast to Saussure, Pound was himself very committed to wedding sign and referent on the model of the ideogram, Pound's distinction between the "game" and "play" of chess in his title for "Dogmatic Statement on the Game and Play of Chess (Theme for a Series of Pictures)" aligns uncannily with Saussure's use of the chess metaphor to parse "langue" and "parole."⁸¹ Chess also allows Pound to make a slight turn away from the model of a finite equation for the poetic image and toward an algorithmic method. His Vorticist poem accounts for the actions and evolution of patterns (what Fenollosa claimed logic could not capture) via a succession of steps—its mathematics are more aligned with the algorithm, that is a sequence of operations, rather than the equation or formula of a binary

⁸⁰ *Ibid.*, 88-9.

⁸¹ Philip Kuberski's *A Calculus for Ezra Pound: Vocations of the American Sign* (Gainesville, FL: The University Press of Florida, 1992) contains a much deeper analysis of Saussure's work alongside Pound's. Kuberski puts it best when he writes: "Saussure made claims that, on their face, would frustrate Pound's desire for a natural sign that could underwrite attempts at precision and control" (2).

equivalence we see in the “Metro” poem. But in order to discuss “Dogmatic Statement” properly, we first need a cursory description of the game and play of chess for the uninitiated.

The game pits two opponents on a board of 64 squares, an eight-by-eight grid of two alternating colors, understood in rows called “ranks” and columns called “files.” Beginning in the lower left-most corner square, the ranks are labeled 1-8, and files labeled a-h. Each player’s side of the board is set with 16 pieces of six types: one king, one queen, two rooks, two bishops, two knights, and eight pawns. Each player’s pieces are, typically, one of two colors—referred to, typically, as “white” and “black” or “light” and “dark,” though the pieces may be of any color. The player with the white/light pieces goes first, and each player proceeds by single-move turns after that. Pieces, or chessmen, move around the board in order to advance, capture opponent pieces, defend their own pieces, or to control important squares or zones of the board. Each of the six kinds of chessmen has differing prescribed movements, though movement in general is limited by a number of factors. Pieces are blocked by other pieces; that is, they cannot move “through” other pieces, except for the knight, which can jump over pieces in its unique L-shaped movement (going two squares in one direction, then one more square at a 90 degree angle in either direction). Pieces can move onto the square of another piece, though only of the opponent’s set, when they capture a piece and replace it. At the outset of the game, the pieces are set in the first two rows, called “ranks,” closest to each player. The eight pawns, on the second rank from each player, can only move forward, while other pieces can also move backward on the board. Pawns move forward one

square each turn (though they may move two squares for the opening move). The movement of pawns is unique because they capture differently than they move—they cannot capture any piece directly in front of them, but they are instead blocked by such pieces. They instead capture on either diagonal in front of them. The king is considered the weakest piece in terms of movement, moving only one square each turn in any direction. The queen in contrast is the most powerful, able to move in any direction as many unimpeded spaces as possible. Rooks move as far as desired as well, but only forward, backward, or side-to-side on the grid. Bishops move similarly but only on the diagonal, and are the only piece that must always remain on the color (of the alternating light and dark squares of the board) on which it stands at the beginning of play.

The goal of the game is to place any of one's pieces in position to capture the other player's king. The game ends in "checkmate": when the king is in a position to be captured ("check") and either cannot move ("escape") or can only move to another position that would result in capture. Smaller victories include taking high-value pieces (though these values count for nothing if one does not ultimately take the king), promoting pawns (when a pawn reaches the opposite side of the board it can be promoted to have the abilities of another type of piece, most typically the ever-flexible queen), and most importantly controlling the center four squares of the board, where pieces then have greater options to move to other sectors of the board, more avenues of movement, and can significantly limit the movement of the other player's pieces. Controlling the center can happen directly or indirectly—directly by occupying the center squares with pieces, or indirectly by moving pieces in the

outer squares in such a way that they can strike easily in on the center, thus limiting the options of the opponent's pieces to move without putting themselves in danger of capture. Even at a slow pace of one turn by one turn, the pieces must always be in motion, challenging the strategy of any given position. Control over the center is always fleeting, as each player must continue to move around each other, breaking and remaking their board positions and the resultant patterns of power. Or, as Pound's poem has it: "These pieces are living in form, / Their moves break and reform the pattern."

In a letter to Harriet Monroe, Pound described his "Dogmatic Statement," first published in her journal, *Poetry*, as the only poem to meet the criteria of "pure vorticism."⁸² Monroe may have suggested the poem had something of futurism, a simultaneous aesthetic movement, to it. Pound took issue with this assessment, writing, "the pictures proposed in the verse are pure vorticism" not futurism, as "the two movements are not synonymous."⁸³ "Admitted," Pound continues, "there is a shade of dynamism in the proposition, to treat the pieces as light potentialities, still the concept arrangement is vorticitist."⁸⁴ This is perhaps why, after first printing the poem in Monroe's *Poetry* (March, 1915), Pound's subsequent printing in *Blast II* (July, 1915) did not include the exclamation points in the final paragraph of the poem. The *Poetry* version of that section reads: "'Y" pawns, cleaving, embanking! / Whirl! Centripetal! Mate! King down in the vortex."⁸⁵ The exclamation points are

⁸² Quoted in Ruthven, *Guide*, 75.

⁸³ *Ibid.*

⁸⁴ *Ibid.*

⁸⁵ Ezra Pound, "Dogmatic Statement Concerning the Game of Chess: Theme for a Series of Pictures," *Poetry* 5.6 (March, 1915): 257.

taken out in the *BLAST* II version, but they reappear in the printing in the *Catholic Anthology* and in *Personae*.⁸⁶ Inasmuch as *BLAST* II was a Vorticist journal, Pound would have wanted to temper the potentially futurist “dynamism” in the poem to distinguish the movements. This would have been less important for later printings of the poem, all subsequent to the short-lived two year Vorticist movement. As many critics of Vorticism have pointed out, Lewis, Pound, and others were mindful to differentiate themselves from both Cubism and Futurism, while still using similar artistic forms. Reed Way Dasenbrock coins the term “dynamic formism” to describe Vorticism’s development of a middle-ground between the cold “deadness” of Cubism, and the “vivacity” of Futurism that became overly “fluid and imprecise.”⁸⁷ Vorticism aimed, instead, for “mastered, vivid vitality.”⁸⁸ As Miranda Hickman parses this phrase of Wyndham Lewis’s:

“mastered” in that, unlike Futurist work, it is controlled and exact, “vivid” and “vital” in that, unlike Cubist work, it is also intensely and aggressively energetic. [. . .] the signature geometric idiom of Vorticism [. . .] both presents exact “pattern[s]” and nonetheless suggests “figures in action”⁸⁹

Thus Vorticism emphasized geometric forms that were, “on the one hand, sharply delineated, and on the other, constructed and arranged so as to suggest driving,

⁸⁶ Ezra Pound, *Catholic Anthology, 1914-1915* (London: Elkin Mathews, 1915), 92; Ezra Pound, *Personae: The Shorter Poems of Ezra Pound* (New York: New Directions, 1926), 124.

⁸⁷ Reed Way Dasenbrock, *The Literary Vorticism of Ezra Pound and Wyndham Lewis* (Baltimore, MD: Johns Hopkins University Press, 1985), 41, 38, 41, 32.

⁸⁸ Wyndham Lewis, “A Review of Contemporary Art,” *BLAST: A Review of the Great English Vortex* II (July, 2015): 38.

⁸⁹ Miranda Hickman, *The Geometry of Modernism: The Vorticist Idiom in Lewis, Pound, H.D., and Yeats* (Austin: University of Texas Press, 2005), 6.

rushing, forceful motion.”⁹⁰ Or as Walter Michel puts it, “jagged” forms” that are nevertheless “sharply bounded by straight-lines or geometric arcs.”⁹¹ Thus, Pound tells Monroe, there is dynamism in his poem, but this is limited: the “arrangement” is Vorticist.

The commitment to bounded mathematical forms and to dynamic vitality is also reflected in the *BLAST* II version of the poem’s title. Whereas in the first printing in *Poetry*, and subsequent printings, the main title of the poem is “Dogmatic Statement Concerning the Game of Chess,” in *BLAST* II the title is extended to “Dogmatic Statement on the Game and Play of Chess.” This characterization of chess in terms of “game” and “play” illuminates both the mathematical/logical aspects of chess, and the creative/artistic aspects. The *game* of chess has a cold kind of logic, it models finite and distinct resources and control over contingent possibilities—chess is a closed system, with a schema of rules, we *think* there is a number of possible moves and finite variations, and the outcome seems to be ruled by cause and effect. The *play* of chess involves the mysterious consciousness of the other player, near-infinite variations and patterns of play. In this way, where it might be a helpful exercise to separate the cold logic of the “game” from the aesthetic potential of the “play,” the play is equally mathematical. Playing chess is an exercise in pattern recognition, analysis, and synthesis. It models creativity at the same time that it teaches abstract reasoning and problem solving, and provides a bounded space to contemplate infinite possibility. The game of chess involves strict rules and limited

⁹⁰ *Ibid.*, 5.

⁹¹ Walter Michel, “Vorticism in the Early Wyndham Lewis,” *Apollo* 77 (January, 1963): 6.

pieces, but the play gives the players a mundane experience of the near-infinite. What better archetype for Vorticism, with its dual aims of precise mathematical rigor and immense aesthetic potential, than a simple geometrical plane with paradoxically limitless potential for generating patterns?

The version of the poem in *Blast II* is reprinted here in full:

DOGMATIC STATEMENT ON THE GAME

AND PLAY OF CHESS.

(THEME FOR A SERIES OF PICTURES).

Red knights, brown bishops, bright queens

Striking the board, falling in strong " L's " of colour,

Reaching and striking in angles,

Holding lines of one colour :

This board is alive with light

These pieces are living in form,

Their moves break and reform the pattern :

Luminous green from the rooks,

Clashing with " x's " of queens,

Looped with the knight-leaps.

" Y " pawns, cleaving, embanking,

Whirl, centripetal, mate, King down in the vortex :

Clash, leaping of bands, straight strips of hard colour,

Blocked lights working in, escapes, renewing of contest.⁹²

The use of “dogmatic statement” in the title participates, inasmuch as it is for a game of logic (chess), in a meaning parallel to axiomatic—that is a formal, official, declarative statement, accepted *a priori* as true, rather than founded on experience or induction. The clash between the two titles, the definitive, manifesto-like “Dogmatic Statement” and the more open, forward-looking and serial “Theme for a Series” is reiterated in the clash between the setting and the action: Pound uses the static grid, sharp angles, and boundedness of the chessboard to nevertheless model fluid and dynamic movement.⁹³ The poem’s title and subtitle also introduce the subtle differences between the Imagist mode and the Vorticist mode. Whereas “In a Station of the Metro” crystallized the moment of capture and the intellectual transformation in a single statement, “Dogmatic Statement” attempts to capture a more extended process, an algorithmic sequence, in a “series of pictures.” In that way it is much like Marcel Duchamp’s *The Chess Players*, completed in 1911 and included in the 1913 Armory Show. Duchamp’s portrait of the chess game attempts, in painting overlapping views of the two players, to capture thinking, just as his

⁹² Ezra Pound, “Dogmatic Statement on the Game and Play of Chess: Theme for a Series of Pictures,” *BLAST: Review of the Great English Vortex II* (July, 1915): 19. The printing in *BLAST II* is actually missing the “t.” at the end of “contest.” Though a reading of the last line using the French *contes* as a “renewal of narratives” would be tempting, compared to all other printings which include the “t” we can only reasonably take this as a misprint.

⁹³ The irony of constraint and fluidity is also encapsulated in Pound’s use of “dogmatic.” In his prose, Pound is generally critical of any kind of dogma, whether religious or political. In his “Axiomata” (*The New Age* [January 13, 1921]: 125-26), he claims in Ax. I.7 that “Dogma is a bluff based on ignorance” (125). The fluidity of the pieces in his “dogmatic statement” is thus ironic when read in conjunction with Ax. I.9 and V.12, where he repeats in each that “Belief is a cramp, a paralysis, an atrophy of the mind in certain positions” (125, 126).

Nude Descending a Staircase No. 2 uses motion lines to show the dynamic movements of the figure in one painted image. Pound's "picture" of chess in the short, fourteen-line poem depicts a series of both movements and intangible mental calculations.

The opening nouns march. "Red knights, brown bishops, bright queens" is more or less iambic. But the next line introduces the series of verbs and participles, as the trochees of line two and dactyls of line three set off a pulse and drive of action. Line three, indented to break us out of the action, "holds" us in the pattern for a moment—"holding lines in one color." The poem backs up to an establishing shot of the board, a static thing in contrast to the pieces, but at that same time calls it "alive with light." The semi-colon stops us on that image, an image of the mental calculation involved in a chess game, that is, the imaginative ability to see the whole pattern, before returning to the pieces, as those pieces which are also "living in form" are able to move again. The statement that occupies the midpoint of the poem—"Their moves break and reform the pattern"—occupies, as it were, the center of the chessboard. This is a position of power and prominence, but it is not always held. The pattern, the positionality of the pieces, is broken and re-formed sometimes several, potentially infinite, times in the course of the game. It is in this way that chess becomes art, the creation of beautiful and creative forms. "Breaking and reforming the pattern" may as well be the explanatory axiom of Vorticism, or of aesthetic modernism according to Pound and his contemporaries. The cardinal poetic works of high modernism such as Eliot's *The Waste Land* and Pound's *Cantos*

are, after all, works which break “cultural artifacts into bits” and reassemble them.⁹⁴ Consider this echo in one of Duchamp’s many comments on the similarity between chess and art:

In my life chess and art stand at opposite poles, but do not be deceived. Chess is not merely a mechanical function. It is plastic, so to speak. *Each time I make a movement of the pawns on the board, I create a new form, a new pattern, and in this way I am satisfied by the always changing contour.* Not to say there is no logic in chess. Chess forces you to be logical. The logic is there, but you just don’t see it.⁹⁵

The “always changing contour” of the patterns on Pound’s chessboard produces a vortex as the movement of the pieces scales up from single points of contact on the board to produce intersecting patterns through their movements. In the light-painting verbally produced, a swirling vortex with “blocked lights” and “luminous” colors shows through the newer patterns. This movement-capture mode of the poem is most succinctly demonstrated in Pound’s use of the Roman alphabet to stand in for the movements of the pieces. Of course, all poetry in romance languages uses the Roman alphabet to represent the movements of the world, but “Dogmatic Statement” abstracts one level, reminding us that individual letters have an abstract character, a form and shape, to make a clearer connection between how marks on the page that form letters and words are like strokes of paint to create figures. In “Dogmatic Statement” we see how knights are “falling in strong ‘L’s’ of colour,” and

⁹⁴ Louis Menand, *Discovering Modernism: T.S. Eliot and His Context* (Oxford: Oxford University Press, 1987), 27.

⁹⁵ Quoted in Dalia Judovitz, *Drawing on Art: Duchamp and Company* (Minneapolis, MN: University of Minnesota Press, 2010), 107; emphasis mine.

rooks are “clashing with ‘x’s’ of queens.” A knight, since it can move two squares in one direction and then one more at a 90-degree angle, is an L of color and the queens produce “x’s” because, among their moves, they can move diagonally both forward and backward. The queen is, offensively, the most powerful piece, able to move and thus to capture in the greatest number of permutations, and thus capable of more Xs—the mark in algebraic chess notation for the taking of a piece. The action of the pieces is concentrated in the single abstract letter, an ample demonstration of Vorticism’s “point of maximum energy.”⁹⁶

Abstracting the pieces into singular alphabetic characters is not a reduction, as in Imagism, but a concentration of animating force—“these pieces are living in form.” Unlike the static image of the Metro poem, the game of chess here is captured in aggregate, “holding lines” of movement in its presentation. The “x’s” of queens are only created in a series of moves (recall the poem’s subtitle as a “Series of Pictures”). This is also true for the pawn, whose description differs significantly from the L of the knight and the X of the queen, and precedes the crucial moment of check mate:

“Y” pawns, cleaving, embanking,

Whirl, centripetal, mate, King down in the vortex:

“Y” pawns invites a question. Why does the “Y” describe the pawn? Because the pawn, the most lowly and seemingly powerless piece, nevertheless has a unique movement as odd as the knight and potentially powerful as the queen. The pawn moves forward vertically one space (sometimes two, in the opening). But the pawn “takes” differently than it moves—it takes pieces on the diagonal in either direction.

⁹⁶ Pound, “Vortex,” 153.

So the pawn is always a potential Y, but only in the superimposed aggregate, in permutations; it can never produce a Y all in one move. The Y is the pawn's potentiality, and it is also part of the pawn's identity. While the poem employs the genitive "of" with the other Roman characters ("L's' of colour" and "x's' of queens"), the genitive is elided in the line about pawns, where the syntactical unit makes an adjective out of the Y and the line's end stresses the verbs: "Y' pawns, cleaving, embanking."

This brings us back to Fenollosa, and his distinction between the traditional western fixation with "things" as nouns, static particulars, and the ideographic approach to things as "verbal ideas of action":

It is not so well known, perhaps, that the great number of these ideographic roots carry in them a *verbal idea of action*. It might be thought that a picture is naturally a picture of a *thing*, and that therefore the root ideas of Chinese are what grammar calls nouns. But examination shows that a large number of primitive Chinese characters, even the so-called radicals, are shorthand pictures of actions or processes.⁹⁷

We must remember Fenollosa's critique that western logic and its reliance on the "to be" verb and statements of identity makes "things" mere "pawns" by failing to capture change, movement, and potentiality. In fact, it is not hard to see the kernel of Pound's paradigm Vorticist poem in the very end of the *Chinese Written Character*, when Fenollosa tells us:

Thus in all poetry a word is like a sun, with its corona and chromosphere;

⁹⁷ Fenollosa, *Chinese Written Character*, 13.

words crowd upon words, and enwrap each other in their luminous envelopes until sentences become clear, continuous light-bands⁹⁸

Fenollosa's description of poetic words seems almost a suggestion for Pound's proposition, in "Dogmatic Statement," "to treat the pieces as light potentialities."⁹⁹ In the poem, the corona of his "bright queens" is both a crown and a chromosphere. The pieces "loop," "clash," and envelop each other in their "whirl" around a board "alive with light." The "Luminous envelopes" of sentences are rendered in the lines "Luminous green from the rooks, / Clashing with "x's" of queens, / Looped with the knight-leaps" and Fenollosa's "light-bands" becomes Pound's "leaping of bands, straight strips of hard colour, Blocked lights working in."

In recasting the light-potentialities of poetic words from Fenollosa's treatise into his poem, Pound also could not miss the chess analogy, used twice in Fenollosa's treatise. "Dogmatic Statement" is, then, both a Vorticist project driven by Fenollosa's critique of western representation, and a rejoinder to *The Chinese Written Character* resuscitating the chessmen, that is, the *Roman character*. Each word in the poem is a light-form, and, if not a sun with a corona, a king with a crown. The King, the only piece name to be capitalized in the poem, is the Vorticist "radiant node" around which energy flows, swirls, rushes into and out of:

Whirl, centripetal, mate, King down in the vortex :

Clash, leaping of bands, straight strips of hard colour,

Blocked lights working in, escapes, renewing of contest.

In these three last lines the game is presumably speeding to an end, as the patterns

⁹⁸ *Ibid.*, 36.

⁹⁹ Letter to Monroe, quoted in Ruthven, *Guide*, 75.

of power break and reform in the circular motion of the vortex, closing in on the king. The king is put in “mate” (checkmate) and thus is “down.” But the potentiality stored in the king, as a piece to be used in the next game, assigned to a new player, as a focal point of the Vorticist poem, or as a mover of history, is not used up, as even as the poem closes, “blocked lights” are “working in,” there is the potential for “escapes” and for the “renewing of contest.” The game may be over, but the play goes on.

“Dogmatic Statement,” more than any other of Pound’s poems, is a demonstration of the poet-as-analytical-geometer theorized in his early prose and further adapted in his Vorticist period. The poem is cleanly geometrical—itsself a - near-perfect 4.75x4.75 inch square that can be further divided into three equal-sized parts in both format (each section roughly 1.5 inches) and logic (title and subtitle, the first seven lines up to the “break” at the semi-colon, and the last seven lines). It performs analytical visualizations and problem solving, describes the geometric transformations on a restricted field of action, models evolution through series, contains the algebraic notation of Xs and Ys, and graphs on its checkered battlefield both straight lines and curves. Indeed the poem geometrically models Pound’s own poetic evolution: the short, fourteen-line ode to chess demonstrates a Vorticist “statement” on the evolution of the Imagist method into a “series of pictures.” In that way it captures in a Western idiom the poetic potential of language suggested in Fenollosa’s papers. We should recall how Pound distances himself from the word as an aesthetic tool in his origin story of the “Metro” poem: “I do not mean that I found words, *but there came an equation . . . not in speech, but in little*

splotches of color. It was just that—a ‘pattern.’”¹⁰⁰ In the “Metro” poem Pound attempts to put an image into words. In “Dogmatic Statement” he embraces language, and its own potentialities, to make words images. He does this through a more developed method of applying analytical geometry to poetry than we see manifest in the “Metro” poem.

In the “Vorticism” essay, Pound speaks of “four different intensities of mathematical expression known to the ordinarily intelligent undergraduate, namely: the arithmetical, the algebraic, the geometrical, and that of analytical geometry.”¹⁰¹ The arithmetical, the mere “ordinary common sense” mode of everyday mathematics, individual sums and addition, is “a simple statement of fact, and does not implicate any other.”¹⁰² The second intensity, the “algebraic relation” of the formula, understands the “underlying similarity” of individual mathematical statements and may apply to “a lot of facts,” yet it cannot, Pound argues, “grip hold of Heaven.”¹⁰³ The problem with the mode of both the arithmetic and algebraic is that it “MAKES NO PICTURE”—it is not axiomatic, not form-giving.¹⁰⁴ The third mode, geometrical intensity, is that of Euclid’s axioms: “when one studies Euclid,” Pound writes, and finds the “ratio between the squares on the two sides of a right-angled triangle, and the square on the hypotenuse” one still writes the mathematical statement the same way, but “one has begun to talk about form.”¹⁰⁵ But it is only talk, according to Pound, description: “statements about plane or descriptive

¹⁰⁰ Pound, “Vorticism,” 100. Ellipses in the original; emphasis mine.

¹⁰¹ *Ibid.*, 104.

¹⁰² *Ibid.*, 105.

¹⁰³ *Ibid.*

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

geometry are like talk about art. They are a criticism of the form. The form is not created by them.”¹⁰⁶ Pound sees in “analytical geometry,” the fourth intensity, the power for creation:

Space is conceived as separated by two or by three axes (depending on whether one is treating form in one or more planes). One refers points to these axes by a series of co-ordinates. Given the idiom, one is able *actually to create*.¹⁰⁷

His description of the “Metro” poem and its analogy structure is arrested in this “algebraic relation” mode. Pound’s singular, reduced image from the “Metro” poem provides an equation, a singular statement. His Vorticist poem, though a “Dogmatic Statement,” brings into fruition a “Series of Pictures”—the atomistic “points” of the splotches of color by which he characterizes the image in his “Vorticism” essay are, in “Dogmatic Statement” fully connected—their Cartesian “co-ordinates” (x, y) become graphic geometrical “lines” and “straight strips,” loops and curves. In “Dogmatic Statement” the “primary pigment” of the image is in fact *graphed*, the motion of the images traced and held in form—a square bordered by the “L” of the “X” and “Y” axes. “Dogmatic Statement” is “graphic” in a way quite unlike the “graphic” nature of the layered images of an Imagist—its idiom incorporates space, working on several axes to bring form into being.

The mathematical intensity that Pound finds isomorphic with poetry is the analytical geometry of Descartes, a significant step beyond Euclid and on the way to non-Euclidean geometry. When we begin as students of geometry we study

¹⁰⁶ *Ibid.*

¹⁰⁷ *Ibid.*

Euclidean axioms for plane geometry. But in the latter half of the nineteenth century mathematicians such as Carl Friedrich Gauss and Bernhard Riemann developed the geometry of curved surfaces, realizing that spheres or ellipsoids require fundamentally different axioms from which to reason. The two halves of Pound's poem play with the two geometries at once, working through Vorticism's somewhat schizophrenic geometry. While the vortex implies spirals, arcs, and curves, the visual art produced by Vorticists favored rectilinear, straight-edged shapes, and the hard angles of centrifugal, rather than the curves of the centripetal, forces. But in *BLAST II*, the second major offering of the Vorticist set, Pound attempts explicitly to incorporate the geometry of the vortex, mapping his own shift from Imagism to Vorticism on that of the shift from Euclidean to non-Euclidean forms. The first half of "Dogmatic Statement" is angular, easily modeled, Euclidean: the knights are "falling in strong 'L's," the pieces are all "reaching and striking in angles" and "holding lines." But after we "break and reform the pattern" mid-poem, the pieces take on a different kind of movement: the straight Euclidean line of the rooks begin "Clashing with 'x's" of queens, / Looped with knight-leaps." Pieces move in a "whirl" or "centripetal[ly]," and the angular L of the knight becomes instead the elliptical "loop." Pound's chess poem performs the rupture of an ancient geometric paradigm mid-poem.

"Dogmatic Statement on the Game and Play of Chess" models two major paradigm shifts of the early twentieth century, the mathematical shift to non-Euclidean geometry and complexity, and a linguistic shift toward understanding language as a semiotic system. Both paradigm shifts had profound implications for

logic and the philosophy of mathematics. The poem bears only passing witness to another, more urgent, paradigm shift concerning the nature of war. In the next chapter, I detail a shift in Pound's axiomatic experiments with language at the advent of World War I—where a king actually goes down in the vortex—and beyond, when Pound's attitude toward literary means for representing experience, particularly a means modeled on logic and mathematics, undergoes a considerable transformation. The magnitude of the First World War would confront Pound, and modernist thinkers in general, with the fallacy of reduction and determinism, as the failure of the existing paradigm for warfare played out in deadly stalemates and the immobility of the trenches.

Part II: Mathematics in Ezra Pound's Aesthetic and Social Theory

CHAPTER FOUR

Casus Bellorum: Pound's Ethical Axioms

There is perhaps no modernist more worthy of the adjective “axiomatic” than Ezra Pound—at least if we draw our opinion from his early work, such as those texts I examined in the previous chapter. As Marjorie Perloff writes:

Whatever poets have made of the actual texture of *The Cantos*, it seems that Pound's poetic, as articulated in the famous essays, has become synonymous with modernism itself. Such axioms as “Use no superfluous word, no adjective that does not reveal something” (“A Retrospect”); “The image is not an idea. It is a radiant node or cluster from which, and through which, and into which ideas are constantly rushing” (*Gaudier-Brzeska*); “Good writers are those who keep the language efficient”; and “Poetry...is the most concentrated form of verbal expression” (*ABC of Reading*)—these aphorisms are now embedded in our critical vocabulary¹

Perloff's initial qualification sets *The Cantos* apart from the axiomatic mode she associates with Pound's pre-*Cantos* work, and indeed Pound's dictum “use no superfluous word” at first glance does seem at odds with the sprawling length, obscure references, and general verbosity of *The Cantos*. Nonetheless, I will argue that the structure and content of *The Cantos* rely on the value of the axiomatic, albeit through an evolution of Pound's mathematical thought from his early poetry and

¹ Marjorie Perloff, “The Contemporary of our Grandchildren: Pound's Influence,” in *Ezra Pound Among the Poets*, ed. George Bornstein (Chicago: University of Chicago Press, 1985), 197.

prose.

Pound's early engagement with mathematical forms, as I detailed in Chapter Three, is characterized by his attempt to define axioms for aesthetic production. He uses mathematical equations to label those aspects of art he deems scientifically demonstrable, to explain how poetry, like geometric statements, creates form, and uses scientific ideas to navigate and narrate the history of beauty. The quest in Pound's early prose, like *The Spirit of Romance*, was to reveal principles of aesthetic order extracted from history and put into practice in his own poetry. Pound's later engagement with mathematics in *The Cantos*, the subject of this chapter, is characterized by an attempt to identify, explain, and convince others of economic truths, axioms he felt would, if acknowledged and allowed to give order to the world system, prevent war and rebuild civilization. *The Cantos* as a "poem including history"² grapples with the way in which aesthetics, artist output, and artists themselves are embedded in a complex political system, one which Pound diagnoses in *The Cantos* as a system predisposed to war. Pound's deployment of mathematical terms and metaphors in his poetry and aesthetic theory changes from his Imagist period to the period of *The Cantos* in a way coextensive with changes in his professed attitude toward war. This shift in the mathematical and militaristic content of Pound's work can be demonstrated by returning to the figure of the chessboard, itself a paradox of freedom and restriction.

² Pound, "Date Line," in *The Literary Essays of Ezra Pound* (New York: New Directions, 1968), 86.

The mythos of chess connects it with all manner of human knowledge; chess is an ample metaphor for abstract, mathematical ideas, perfect social order, and complex systems. Dubious origin myths claim chess as an invention of Pythagoras to demonstrate the concept of number, count its invention amongst those of ancient Greek hero Palamades along with counting, coinage, and measurement, and read its history into images of wall paintings in the tomb of Nefertiti (showing the queen playing senet, a game that visually resembles chess). Most modern histories, like H.R.J. Murray's widely popular *A History of Chess*, the twentieth-century standard, claim the game that would become chess emerges from India and dates as far back as at least the 6th century A.D.³ The modern version of the game flourished globally in the nineteenth century, and twentieth- and twenty-first-century scholars have used the game to study memory, logic, math, and artificial intelligence.

Two major metaphoric deployments of chess are in the context of warfare and of mathematical concepts. The war mode works via a principle of reduction. If one of the principle uses of metaphor is to reduce complexity, to define the unwieldy in the simpler terms of the concrete, chess as a metaphor for war works perfectly this way—reducing the world scene to the 64 squares of a chessboard, abstracting the senseless, messy violence to scores of individual soldiers into one smooth, logical pawn, the contingency of political machinations to logically-traceable cause and effect. Chess is often deployed as a metaphor for seeing war as simply a

³ For more on the history of chess see: H. J. R Murray, *A History of Chess* (London: Oxford University Press, 1913) and David Shenk, *The Immortal Game: A History of Chess* (New York: Doubleday, 2006).

“numbers game”—a war of attrition, wearing away at the opponent, reducing their forces (pieces) until control of the field (board) is lost.

This war game has also long been a centerpiece in “recreational mathematics,” wherein logical puzzles and mathematical concepts can be worked out on its board. Sometimes these puzzles are related to chess play itself, as in the chess problem, a logic problem for strategic game-play (checkmate, pawn promotion), or more abstract geometrical puzzles (swapping positions with black, achieving a given “tour” of the board, etc.) independent of typical game-play. Other times the board is a setting for demonstrating mathematical concepts beyond the particularities of chess play, like the difference between arithmetic and geometric sequences. Indeed, the most famous origin myth of chess demonstrates the birth of chess as a setting for militaristic and mathematical concepts at the same moment. A scholar (or in other stories a priest or a mathematician) invents chess and presents it to the king, who enjoys the game, finding it an apt description of warfare, especially with a sovereign as the most critical piece. The king offers chess’ creator payment. As Lee Ratzan retells the fable:

The supposed origin story of the game has a dark side. The king was so delighted by the game that he granted the courtier anything he desired. The man asked for one grain of wheat to be placed on the first square of the chessboard, two grains on the second square, four grains on the third square, and that it be so doubled for each successive square. The king thought this a trivial request and ordered it to be done, but the powers of two accumulated so quickly that the royal warehouses were soon emptied of grain that was

needed to place on the squares. The first chess master was jailed, exiled, or executed according to different versions of the story.⁴

Thus the chessboard performs a transformation from the mundane to the near-infinite, demonstrating the actual antinomy of common sense and mathematical reality. The king misunderstands the accumulation of grains as an arithmetic sequence—one grain on square one, two on square two—and thus sees the request as trivial. The exponential growth of the geometric sequence, with numbers growing by the power of two each square, shows how the chessboard's seemingly simple eight-by-eight grid is nothing but. In the grain problem, the last square would contain 2^{63} grains, approximately more than one billion-billion. That would put the total number of grains on the board at 2^{64} , approximately 18 billion-billion. That's 18,446,744,073,709,551,615 grains in payment. The mythic payment was never rendered, as this number would be an impossible heap.

This demonstration of exponential growth is not completely divorced from the play of chess, however. The game has never been quite proved to be finite in its possibilities for variation. Despite a limited number of pieces, moving in a limited number of ways, on a board with a limited number of squares, the number of legal positions and potential variations has not quite proved absolute nor measurable. At the opening of a game each side has 20 possible moves. But after only one move from each side, the number of possible positions, like the grains of wheat, grows geometrically rather than arithmetically—20 times 20, rather than 20 plus 20. After three moves each, there are over 900 million different possible positions. Mid-

⁴ Lee Ratzan, *Understanding Information Systems: What They Do and Why We Need Them* (New York: American Library Association, 2004), 113.

century, Claude Shannon, a pioneer in information theory, approximated the potential variations in a game of chess at 10 to the 120th power, exceeding the number of atoms in the observable universe. This is an estimate: all possible moves for all possible chess games have yet to be mathematically modeled, even with high throughput computing.

The paradox of chess's simplicity and complexity is also evident in its denotation of both divine order and arbitrary absurdity. The chess game as a metaphor for perfect civilization, or clean, strategic military achievement, for instance, elevates the concept to that of perfect logic: everything in its place, every piece fulfilling its proper role, the world balanced in Manichean symmetry. At the same time, it can be deployed to mock the haphazard, pointless moves of our lives—it's just a game with arbitrary rules, after all. Or, more often, the game of chess is invoked as a metaphor for a cruel world in which we are the pawns—moved across the board by corrupt governments, capitalism, or divine machinations. The chess game is both the metaphor for supreme concentration or premier use of human knowledge, and for simplified views of the world and pointless victories.

This schizophrenic nature of the chess metaphor is perhaps why it is so portable, and why it is an apt metaphor for the early twentieth century's paradoxical search for the axiomatic and discovery of the complex. On the one hand, chess is a game of finite and distinct resources. On the other, the play of chess is an experience of the infinite. Chess can always be made logical from the endgame—once all the moves have been made. And one can memorize all of the possibilities for the opening, the first few moves of the game. But the middle game is an experience of

near infinity. The game of chess was a model for the mathematical precision that Pound aimed for in his Imagist and Vorticist writing, but the play of chess accounts for that which exceeds Pound's best efforts at reducing the empirical to concrete images, a failure he disconsolately confirms in his later cantos.

In his pre-war essay "Through Alien Eyes" (1913), Pound writes of being an American in England, viewing British politics from the position of an outsider (an "alien"), and offers advice on such matters as conscription, taxes, and universal adult suffrage. His position affords him a smug, expatriate existence, writing poetry in the "musty old studio" of England and yet unengaged with national interests. He flippantly comments on the possibility of a war between England and Germany, assured that he's not responsible to protect the "crumbling empire" either rhetorically or physically:

Why do I live in England? Because I am an artist of a sort—though poetry is not usually counted an art—still I am given to thinking of myself as an artist, so it comes to the same thing so far as I am concerned. And England is a comfortable, musty old studio where no one runs carpet-sweepers under my easel. I know that I am perched on the rotten shell of a crumbling empire, but it isn't my empire, and I'm not legally responsible, and anyway the Germans will probably run it as well as you do.⁵

A war seems unlikely to occur, in Pound's estimation, as war "between nations of equal civilisation" at that moment in modern, progressive history, seems "an

⁵ Ezra Pound, "Through Alien Eyes" *The New Age* 12.11 (16 January, 1913): 252.

anachronism.”⁶ But even if there were a war, he outlines many reasons he could not be drawn into caring, based on his nationality, his pacifism, even his class position. To further emphasize his distance and lack of interest in the outcome of a still only imaginary war, Pound uses a chess metaphor:

Of course I am a pacifist; every American is a pacifist. War is a mess and a bother. It is, between nations of equal civilisation, an anachronism [. . .] The Englishman has the sense of property-of his own property. It has made his empire; made it as fanaticism made the empire of the Crescent. The German has the sense of the State. This is a thing more modern and destined for its own slow victory. *All this is of little moment to me. I am disinterested and detached from the particular encounter as much as if I were a fairly perspicacious China-man. It is only a game of chess.*⁷

Before and at the beginning of the war, being “disinterested and detached” may have afforded one the “perspicacious[ness]” of a “China-man”—that is an outsider’s sagacity, but also the prospect of a viewer from outside and above, a spectator to a chess game. To view the conflict as “only a game of chess” is to dismiss the conflict as an unnecessary triviality, a conflict fought for political and economic gains that didn’t apply to all, and certainly not to an ex-pat artist for instance. Pound, like many modernist artists, was an expatriate with amorphous national affiliations, and it is unsurprising that his early response to the war was to essentially declare a plague on both houses. As dismissive as calling the war a chess game would appear a year later, when a war between Germany and England was actualized, the distance

⁶ *Ibid.*

⁷ *Ibid.* Emphasis mine.

Pound felt to World War I, like that allowed to the spectator of the chess game, granted him the ability to critique war as an institution. But the ambivalent position of the modernist non-combatant was not so easily inhabited by all artists, and this attitude shifted greatly as the losses of war were more widely felt. Pound's pre-war claim to be "disinterested and detached from the particular encounter" has interesting resonances with T. S. Eliot's post-war reflection of his own non-combatant status. In a 1920 letter to Herbert Read, Eliot reflects on their respective difference in experience, writing, "I speak not from extreme age but from the advantage or disadvantage of a C2 rating which kept me out of the army—I have been a disinterested spectator of the struggles of others with war and peace."⁸ Both use the term "disinterested," but Pound's easy detachment, his smug position above the chessboard, contrasts Eliot's apologetic and uneasy role of the "spectator" to the "struggles of others." The level of abstraction from the trenches may lead one to be disinterested and ambivalent to the war, and even afford space to critique the nationalist ideologies involved, but as modernist artists saw those from their own ranks enlisted and killed, the previously privileged position of "spectator" became not only increasingly disconcerting, but nearly impossible, as the First World War's totalizing logic drew non-combatants alike into its scope.

In 1914 and 1915, Pound and his literary contemporaries were just beginning to see the effects of the so-called "Great War," mostly in delays in publications and in experimental publishers needing to suspend publication or even

⁸ Letter to Herbert Read: 20 June, 1920, in *Letters of T. S. Eliot, Volume 1: 1898-1922* (New Haven: Yale University Press, 2011), 386.

close up shop.⁹ Many feared that the war would quash avant-garde spirit and experimentalism. Indeed, Pound's letters from 1914-1915 include copious references to war-time delays in mail delivery, fund transfers, and publications, as well as allusions to periodicals' changing their content to reflect a public interested in news, essays, and literary production on war topics.¹⁰ By 1915, however, these seemingly impersonal practicalities are interspersed with notices of deaths in the trenches: Rupert Brooke, Remy De Gourmont, and Henry Gaudier-Brzeska.¹¹ The war's devastations to art, which had before been spoken of in terms of lost revenues and cancelled volumes, turns to talk of lost lives, as Pound writes in a letter to Felix E. Schilling in June of 1915:

Gaudier-Brzeska has been killed at Neuville St. Vaast, and we have lost the best of the young sculptors and the most promising. The arts will incur no worse loss from the war than this. One is rather obsessed with it.¹²

While the 1913 Pound was glib about the "mess and bother" of war and at work on refining Imagism, the 1915 Pound is *obsessed* by the accumulating losses of the war, and beginning principle work on what will become *The Cantos*. What happens in

⁹ Letter to Harriet Shaw Weaver: 12 October, 1914: "For the rest I think The Egoist can very well 'suspend publication during duration of war.' That is better than shutting up shop altogether" (*The Letters of Ezra Pound, 1907-1941*, ed. D.D. Paige [London: Faber and Faber, 1951], 82).

¹⁰ Pound, *Letters*, passim. Note also comments like this from *The New Age*: "The autumn publishing season is likely to be poor, of course; and I, for one, shall not regret it. [. . .] At the present moment, I suppose, at least fifty publishers are competing with each other for the production of war-books. But by the winter at latest the public will have had a bellyful of war; and in any case, except for some a half dozen works, no book can compete with the daily Press" (R. H. C., "Readers and Writers," *The New Age* 15.19 [10 September, 1914]: 449).

¹¹ Pound, *Letters*, 103; 109; 106.

¹² *Ibid.*, 106.

between—the outbreak of war, Vorticism, the first publication of “Dogmatic Statement”—gives us an insight into an important midpoint in a shift in Pound’s attitude toward war, his place as an artist, citizen, and friend in wartime, and the general response to war of modernists prolific in the little magazines of the pre-war years, particularly non-combatants who could resist being drawn directly into the war.

Between the publications of the high-profile pre-war examples of avant-garde aesthetic modernism such as “In a Station of the Metro” (*Poetry*: April, 1913) and “Vortex” (*BLAST I*: June, 1914) and their early-war counterparts of “Vorticism,” (*Fortnightly Review*: September, 1914) and “Dogmatic Statement” (*Poetry*: March, 1915, and *BLAST II*: July, 1915), the world scene had entirely changed. A mere month after the publication of “Vortex” in *BLAST I*, a world war had begun. Though at the outbreak of war in 1914 all sides expected the war to be short-lived, this war soon turned out to be different from all other wars. The severe carnage, wrought by unprecedented technological warfare in the form of heavy artillery and distance weaponry, with nearly thirteen million combatant and civilian deaths in four years, was a dividing line in human history, and a paradigm shift in military thinking. Also in question was the applicability of the pre-war avant-garde thinkers in science and literature to the current state of affairs. A December, 1914 editorial in *The New Republic* reflects this sudden incompatibility of experimentalism in the arts and sciences with current world affairs:

Who cares to paint a picture now, or to write any poetry but war poetry, or to search the meaning of language, or speculate about the constitution of matter?¹³

In Britain, where Pound was living, the war saw a move away from the preservation of the status quo, the ubiquitous British idea of “business as usual,” toward the condition of complete state intervention in public affairs through such legislation as the Defence of the Realm Act in 1914, and the political machinations of David Lloyd George after 1916. Such legislation, as well as the first aerial bombardments of cities in Britain blurred logical boundaries between combatants and non-combatants. The revolutionary spirit of the Vorticists in the first volume of *BLAST* quickly hit a wall of incompatible public opinion as nations re-imagined every social role and cultural product in light of the war effort. As John Xiros Cooper deftly explains:

The Men (and Women) of 1914—Lewis, Joyce, Eliot, H.D., and Pound—were going to change the world.

The world may have been bemused, even taken aback, by the brash brio emanating from *Blast* in 1914, but it wasn’t about to beat a path to Pound’s triangular sitting room in Kensington Church Walk. Instead, the world in 1914 was marching to a different beat and heading for a rather different

¹³ This selection from *The New Republic’s* editorial “Force and Ideas” was reprinted in *The Commercial West* 26.24 (12 December, 1914): 31. Ultimately the editorial argues that, though this is the reigning public opinion, “the fact remains that the final argument against cannon is ideas,” and that these ideas need to be put back into the service of the progress of civilization, not the war machine (31).

vortex. The carnage of the Great War put an end to the hopes of the first generation of modernists.¹⁴

A 1914 editorial in the *Chicago Tribune* reflected the notion that journalistic and poetic output was no longer up to the task of recording the carnage, asserting “the war of nations has discovered the poverty of language. Words are insufficient for the job.”¹⁵

An editor’s column in *The New Age* turned this critique directly on Pound and the Vorticists.¹⁶ Though Pound contributed to *The New Age* over the course of ten years (from 1911 to 1921), the editors spared him no war-time acrimony. The editorial introduces the problematics of wartime “spectatorship” in the press, and moves immediately to a literary example in the form of Pound’s then-recent “Vorticism” essay:

When a Dreadnought fires a broadside it is lifted several feet in the air—
 Forgive me, that has nothing to do with me. I do not realise what it means, I
 can draw no intelligent inferences from it, I can make no use of the fact. And
 it is the same with ninety-nine of every hundred of the statements daily made
 concerning the war in the Press. Save for the knowledge that the true
 statements among them will sooner or later affect us, the event is no more

¹⁴ John Xiros Cooper, “Pound Before Pisa: 1920-1945,” in Ira B. Nadel, ed., *Ezra Pound in Context* (New York: Cambridge University Press, 2010), 448.

¹⁵ “War, as Editors See It.” *The Commercial West* 26.6 (18 August, 1914): 21.

¹⁶ I’m indebted to Ann L. Ardis’ *Modernism and Cultural Conflict, 1880-1922* (New York: Cambridge University Press, 2002), for highlighting *The New Age*’s columns criticizing Pound and Vorticism. My references from the text and readings of the text exceed those included in her chapter five (143-172), however, turning directly to the pages of *The New Age* in order to capture more of the war-related commentary from the editors.

than a spectacle, or, rather, the record of one. Only when we are personally engaged with reality, either directly or indirectly, by means of our relations with the actors, can we drop the mood of the spectator to take up the psychology of the player in the drama. Then, let us hope we can play our part as well as now we ought to look on.

In the "Fortnightly Review" Mr. Ezra Pound writes on "Vorticism." Whether or not he knows it, Vorticism is dead.¹⁷

The "death" of Vorticism would be widely declared, refuted, and discussed in the modernist little magazines of 1915, as a casualty of the war, and as a failed enterprise *because of the war*. As *The New Age's* pseudonymous "R.H.C."¹⁸ continues:

It was, at best, only a big name for a little thing, that in the simmering of the pre-war period suddenly became a bubble, and is now burst. Of the magazine "Blast," which was devoted to the propaganda of Vorticism, I doubt whether another issue will appear.¹⁹ Compared with the war it is incomparably feeble.

Mr. Pound, however, tries to establish some connection between "Vorticism"

¹⁷ R. H. C., "Readers and Writers," *The New Age: A Weekly Review of Politics, Literature, and Art* 15.19 (10 September, 1914): 449.

¹⁸ A pseudonym primarily used by editor A. R. Orage, but occasionally also by other regular contributors.

¹⁹ Yet Vorticism persisted, at least for a short while, and another issue *did* appear. The "War Number," as the second volume called itself, opens with an "Editorial" that is arguably dismissive of Europe's "difficulties," as Wyndham Lewis, the editor, writes:

BLAST finds itself surrounded by a multitude of other Blasts of all sizes and descriptions. This peuce-colored cockleshell will, however, try and brave the waves of blood, for the serious mission it has on the other side of World-War. (Lewis, *BLAST* II, 5).

In the "NOTICE TO THE PUBLIC" that immediately follows, Lewis refers to the delay in the second volume's appearance, but also optimistically predicts that "two further numbers will probably come out before next January" (Lewis, *BLAST* II, 7). There were no subsequent volumes.

in painting and design and “Imagism” in verse. As usual, he is very obscure and the more so for the pains he takes to disguise the real relations. Mr. Pound happened to like Mr. Wyndham Lewis, and there you are! That this is a thousand times more probable than Mr. Pound’s explanation appears from this: that while he defines Imagism, his own contribution to the common stockpot, quite clearly, he nowhere in the article has a clear word to say on the subject of Vorticism²⁰

Though R.H.C. critiques the motives and explanation of Pound’s relation of poetic Imagism to visual Vorticism, the connection itself is crucial to his critique that Pound’s poetic output is incompatible with the current political situation, for he sees the alleged private contemplations and aesthetic abstractions of Imagism to be incommensurable with the urgency and public controversy of war. The column reprints “In a Station of the Metro,” and continues,

The image here, you are to understand, is Mr. Pound’s imaginative equivalent for the scene of which he was a sensitive witness; and we ought further to conclude this is the perfect image. But is it? On the contrary, I could invent a score of other images of quite equal equivalence. So could anybody. Meredith was perpetually doing such things: his “dainty rogue in porcelain” is the most familiar instance. Shelley was prolific in them. The Japanese have made their only literary art of such bon-bons. What of these, for instance, as other images of the same scene: white wheeling gulls upon a muddy weedstrewn beach; war medals on a ragged waistcoat; patches of blue in a sky of smoke-

²⁰ R.H.C., “Readers and Writers,” 449.

coloured clouds; oases in a sand-storm; flaming orchids growing upon a gooseberry bush; mistletoe on bare trees snow-clad; iridescence upon corpses; a robin's song on a dark autumn day. Had enough? I could go on ad infinitum. But I should not set up as an Imagist, but only as a journalist, on the strength of them!²¹

Only a year after its publication, the "perfect image" of 1913 has become quaint, compared to something "dainty" and "porcelain," trivialized as a "bon-bon." Pound's pre-war "apparition" is too ethereal, ill-suited to the corporeal, bloody reality of 1914. We should note, here, that the editor, even in his dismissal of such images, cunningly offers up replacement images touched by the realities of war. Amidst satirical phrases like "white wheeling gulls upon a muddy weedstrewn beach" and "mistletoe on bare trees snow-clad" are "war medals on a ragged waistcoat," "smoke-coloured clouds," and most severe: "iridescence upon corpses."

It would be a mistake to see *The New Age's* editorial as simply a call for more war poetry, prose, and news coverage. The piece is equally critical of war coverage in the press and the war literature produced thus far, claiming as writers "we are a lazy lot and gape at the war."²² Rather than the passive, spectator-like records of atrocities in the press, or the active but "feeble" creation of newness he credits to Vorticism, the writer calls for poetry, prose, and journalism capable of actualizing the position of existing in the middle of a cultural shift, and advocates intellectual output which acts as a watchdog against the paradigms of the past. "The present is not for creation," he writes, "but for holding up the mirror of the future to the

²¹ *Ibid.*

²² *Ibid.*

models of the past.”²³

Being in the middle of an as yet unfinished transformation produced startlingly asymmetrical cultural output in the early war years, and examples in both the popular press and in Pound’s poetry and prose of the metaphor of the “game of war” offer a unique window into this phenomenon. While Pound’s use of the “game of chess” in “Through Alien Eyes” in 1913 is obviously deployed flippantly, a thought-piece in *The Times* of London from March 1915 uses the chess metaphor in a tone mixing the glib and the devastating. “The Game of War: New Players on an Old Playground,” can be read as both sensitive to the seismic cultural shift taking place and as oddly trivializing of modern warfare. Writing about soldiers training on London’s “great playground,” Hampstead Heath, where erstwhile Boy Scouts playing at soldiers have been replaced by “others in uniform, and older than the boys, playing [. . .] a game in grim earnest” the piece is mindful of the “strange horror” in the parallelism between a child’s playground and real war-games.²⁴ And yet, the piece finishes with the hope that after “the best of games” the soldiers may “come home [. . .] as well and as happy as the weary bands [of children] that used to troop laughing home to tea.”²⁵

Another extended metaphor of the “game of war” appears in *The Times* as late as 1918, again serving to trivialize the real perils of modern warfare with its incredible loss of life. The issue, like many of its era, is dominated by war news, including stories of awarding the Military Cross to soldiers, the rise of tuberculosis

²³ *Ibid.*

²⁴ “The Game of War: New Players on an Old Playground,” *The Times* of London (10 March, 1915): 13.

²⁵ *Ibid.*

among servicemen, a special section of the obituaries devoted to those “killed in action,” and another special section for the marriage notices discussing hasty marriages between daughters at home and soldiers at the front. Amidst such headlines as “Heavy Shelling,” and “German Savagery,” appears an early-twentieth century example of what we now call “infotainment,” a short, trivial column about chess that reduces servicemen to chess pieces in an extended metaphor. “The Game of War: Chessmen and Soldiers,” authored simply by “a correspondent,” offers a comment on the “common amusement” of chess and its parallels to war, but with strange elision of the horrors of war witnessed by 1918.²⁶ The analogy begins by stressing the scientific aspects of chess: “Indeed chess has always been one great war game [. . .] Chess is admittedly a scientific game: it is strategical and mathematical.”²⁷ This comparison is not inappropriate, though distressingly optimistic to a post-war reader; the Great War was paradoxically the most bloody to date and yet held up by many at the time as an example of “clean” warfare, attempting to use strategy and logic, both in battle maneuvering and in the form of economic sanctions and political pressure, in order to avoid bloodshed. But the use of mathematics and logic in the form of war technology, and the stalemates in the trenches caused by armies being *too* attuned to each other’s logics, had the opposite effect. The main purpose of the short article is to “justify” the “old association” of chess with war to the modern war at hand:

A general study of the game is certain to prove a useful adjunct to soldiers in

²⁶ “The Game Of War: Chessmen and Soldiers.” *The Times* of London (11 January, 1918): 9.

²⁷ *Ibid.*

training; for the science of the openings, the mathematical symmetry of the middle game, and the careful analysis of the end game teach the player many warlike lessons [. . .] If we qualify the chess pieces in some such way as this, *then the similarity of chess to war is startling*: rename the pawn, call him an infantryman; then we shall say the bishop represents the cavalry; the knight the light guns; the castle, of course, must stand for the heavy howitzer. What about the king and queen? Let the king remain the king, the State, the country—in short, what we are fighting for. The queen, she is the general staff, of the very fount from which issue the plans for victory.²⁸

This comparison may not have been out of place in the popular press of 1914, when men marched off to war from major European countries cheered on by patriotic crowds, to play the “best of games,” sure of quick victories and to be home by Christmas. But it’s hard to imagine a public in 1918, still at war, reeling from an already catastrophic loss of life, to see anything “startling” in the “similarity of chess to war” other than the author’s un-ironic comparison of a rook to the “heavy howitzer” and their brothers, husbands, and friends at the front to “pawns.” A few days later, however, another missive from the same “correspondent” appears in *The Times*, again amidst dismal news of the war dead, to comment on “Go: The Japanese War Game.” There is a more realistic edge to the second installment, which recognizes how modern warfare has moved from previous wars’ chivalric notions to the logic of total annihilation:

Chess and also draughts certainly resemble the ‘absolute’ war of Clausewitz.

²⁸ *Ibid.* Emphasis mine.

Nothing in these games counts save the ruthless use of power and position; every man is in play, and no sacrifice of men must be grudged, if it will establish a winning advantage; and the principle of concentrating the utmost force possible at the decisive point is particularly well illustrated. Chess is manifestly a similitude of chivalrous warfare between West and East—the white king is Richard Lion-heart, the black king is Saladin! That is why it was at the height of its popularity midway through the Middle Ages. But the more mathematical game of draughts is nearer to the science of modern warfare, in which little visible pomp is left, and sheer numerical superiority is even more important a factor²⁹

It is of course not unheard of to see such columns in the periodicals of the war years; in fact we might say that the newspapers and magazines of those years are characterized precisely by this mix of dire news of death and destruction amongst the everyday columns and advertisements of a world at home that must, in its own way, “soldier on” through domestic consumption and the business of everyday living. The advertisements for war products in these same issues of *The Times* attest to this unsettling mixture, as ads vie to adapt the language of peace-time advertising to the context of unending war. For example, this ad copy for Burberry topcoats “for Winter Campaigning!”: “Doubly covering vulnerable areas, it affords an efficient shield against tempest, wet or cold, in a form that maintains every Service tradition of smartness and distinction.”³⁰ Or, for Lotus waterproof boots, which implores its consumers “whether at home or at the front, anxious to have warm, dry feet this

²⁹ “GO: The Japanese War Game.” *The Times* of London (17 January, 1918): 9.

³⁰ “Burberry Service Kit [Advertisement].” *Times* of London (24 September, 1915): 4.

winter” to “always look when buying Lotus for the name on the soles.”³¹ Even more telling, an advertisement for Dri-Ped shoe inserts, which plays on the totalizing logic of World War I, in which the lines between combatant and non-combatant are blurred through scarcity at home: “If Dri-Ped is difficult to get at home—don’t grumble: you know the reason why.”³²

This asymmetrical incorporation of the war into discourse plays out similarly for Pound, whose “Dogmatic Statement” both uses the “Game of War” metaphor and appears initially in a context not yet fully subsumed by wartime. The poem first appeared in the March, 1915 volume of *Poetry*, nine months after the outbreak of World War I, along with a more explicitly acknowledged war poem, “The Coming of War: Actaeon.” But the two poems are not in an explicit context; instead the poems by Pound collected in volume 5.6 are a veritable grab bag of his interests and poetic modes. The sequence begins with “Provincia Deserta,” a poem in the tradition of Pound’s earliest poetry and his ruminations on the troubadours in *The Spirit of Romance*. The poem, inspired by Pound’s 1912 walking tour of southern France, takes the reader through a list of places and names of historical figures. There is an angle of modernist lament here, for the province marked by these impressive cultural landmarks and the landscape sung by the historical troubadours is now a desert, a past that perhaps cannot again be brought to bear growth. As the poem

³¹ “Lotus [Advertisement].” *Times of London* (11 January, 1918): 8.

³² “Dri-Ped [Advertisement].” *Times of London* (11 January, 1918): 9. This is typical of advertisements for products used by combatants, which often make clear their government contracts and conflate war-time scarcity with general consumer demand, such as another Lotus shoes advert attests: “Officers actually at the front always get Lotus, whilst officers at home, even those over on leave, have to go without, so short is the supply of these boots.” (“Lotus [Advertisement].” *Times of London* [18 February, 1918]: 8).

closes, “So ends that story. / That age is gone; / / I have walked over these roads; / I have thought of them living.”³³ “Image from D’Orléans,” the poem that follows, sutures Pound’s high-medieval mode with that of Imagism, by means of this short poem, a translation of the first eight lines of a song by medieval poet Charles of Orléans. Though the translation follows D’Orléans’ clip-clop rhyme scheme to describe the “Young men riding in the street” rather than the typical sparse free-verse of an imagist poem, the poem’s isolation of the first image of D’Orléans’ song, along with the use of “Image” in the title, seem to attempt to highlight the subtle imagistic elements already at work in the original.³⁴ It’s not clear that the poem is successful in this, but Pound declared his intention a month earlier in a piece in *T.P.’s Weekly* that “Imagisme exists in [. . .] ‘Charles D’Orléans.’”³⁵

The source material for the next poem, “The Spring” takes *Poetry’s* readers further back in time, to the sixth century B.C., to a poem by the Greek lyric poet Ibycus, another figure Pound counted among *Des Imagistes*.³⁶ The ancient and Imagist trappings of “The Spring” provide an apt bridge to “The Coming of War: Actaeon,” which, while ostensibly a poem about a figure from the mythic past, is in its implied equivalence to the coming of the *current* war, actually a war poem. Nonetheless, it presents its content in an imagist mode, with diction worthy of a poem by Aldington or H.D.:

An image of Lethe,

and the fields

³³ Pound, “Provincia Deserta,” *Poetry* 5.6 (March 1915): 254.

³⁴ Pound, “Image from D’Orléans,” *Poetry* 5.6 (March 1915): 254.

³⁵ Quoted in Ruthven, *Guide*, 147.

³⁶ *Ibid.*, 227.

Full of faint light
 but golden,
 Gray cliffs,
 and beneath them
 A sea
 Harsher than granite³⁷

“Actaeon” is followed by “The Gypsy”—a piece which returns to an anecdote from Pound’s walk about southern France—rather than the more fitting war-fellow “Dogmatic Statement,” which follows after “The Gypsy” to end the sequence of original poems. Perhaps this is why the two war poems are interrupted by “The Gypsy”; the newest, Vorticist poem is given the powerful position of the end-cap, and is “signed” at bottom by the name Ezra Pound, given the distinction of the maker’s imprimatur.³⁸

The signed sequence is then followed afterward by “Exile’s Letter,” which is divided from the others by an epigraph introducing it as a translation of Li T’ai-po. In this way “Exile’s Letter” is set off from the sequence, as part of a different project, something of a teaser for *Cathay*, published a month later in April of 1915, where it will reappear. Many of the poems in *Cathay* explicitly take up war themes, with poems like “Song of the Bowmen of Shu” and “Lament of the Frontier Guard” reflecting the loneliness of the soldier’s life and the barbarousness of war-mongering kings. Hugh Kenner claims that *Cathay* is “largely a war book, using

³⁷ Pound, “The Coming of War: Actaeon,” *Poetry* 5.6 (March 1915): 255-256.

³⁸ See the name “Ezra Pound” following “Dogmatic Statement” on page 257, although the poems following to 261 are also contributions of Pound’s.

Fenollosa's notes much as Pope used Horace or Johnson Juvenal, to supply a system of parallels and a structure of discourse" via "an oriental obliquity of reference."³⁹ Contemporary reviewers were not so quick to claim *Cathay* as a volume for war-time, however. Sympathetic reviewers from within the poetic community concentrated more on the beauty, images, and technique for rendering universal emotions in *Cathay*, rather than the content of the poems. Even Orage praised *Cathay* in *The New Age*, but without so much as a mention of the war. Ford Maddox Ford's 1915 review of the volume did highlight how Pound's selection of translations applied to current feeling when he wrote, "what could better render the feelings of protracted war than 'Song of the Bowmen of Shu'?"⁴⁰ Nevertheless, even allowing for layered interpretations of loss, death, and failing civilizations in the poems, editors were starting to sense that public readers, newly weary of Imagism's perceived distance from current events, were also going to be less generous to the translations of poems a thousand years distant.

The perceived trivialities of the courtesans, brocade palaces, patterned silks, and delicate flowers of *Cathay* and Imagism's aim at simplification and reduction did, well into the war, strike the public as inadequate to the age. Lewis Worthington Smith criticized "the new movement" in poetry in *The Atlantic Monthly* in 1916 as childish and out of step with the current age's complexity:

The movement toward imagism and free verse is theoretically a revolt against the prevailing literary form or forms; but the interesting thing is that the attempt to revert to more elementary forms has resulted at once in a

³⁹ Hugh Kenner, *The Pound Era* (Berkeley: University of California Press, 1971), 202.

⁴⁰ Ford Maddox Hueffer, "From China to Peru," *Outlook* 39 (19 June, 1915): 800-801.

reversion to the more elementary in substance. It is an astonishing thing. Among a highly sophisticated people, at the heart of a more eagerly progressive civilization than the world has ever known before, there develops in the highest, most complex, and most intellectual of the arts, the art of literature, a movement [. . .] content merely to look at things, like a child, open-eyed and open-mouthed, to report the retinal image to the brain, to transfer it to innocent blank paper, and lastly to impose it on a credulous world for poetry⁴¹

This account of poets as open-mouthed children gaping at things, or the poetry they produce as a mere, passive record of retinal images on the brain recalls not only Pound's own account of writing "In a Station of the Metro" but also *The New Age's* critique of Pound as a mere "sensitive witness" in the metro station of Paris. Though Worthington Smith recognizes in the article that the "new movement" in poetry is a variegated group, he nevertheless cites Imagism and Pound as particularly representative in his critique:

That egotistic self-consciousness is a primary motive in the new movement appears sufficiently in the demand on the part of Mr. Pound, the self-appointed high priest of the coterie, that poets be endowed so that they may escape the need of writing to please the public.⁴²

Indeed the public response to "Dogmatic Statement" in *Poetry* was to see it as an abstraction, a superficial example of the content-less experimentalism of the "new

⁴¹ Lewis Worthington Smith, "The New Naivete," *The Atlantic Monthly* (April, 1916): 488.

⁴² *Ibid.*, 491-2.

movement” in poetry. Within the same month of its publication in *Poetry*, the *Indianapolis News* picked up “Dogmatic Statement” and reprinted it. The poem appears not in its original form, however. The article begins in a heavily sarcastic send-up of the “new poetry”:

Always with a feeling of mingled awe and wonder at what is done nowadays with the English language in the name of new art we greet that inspiring periodical published in Chicago which bears the name, *Poetry*, and is issued once a month. Until its pages are read one can have no idea how much poetry there is in the world, and it is barely possible; even after reading two or three issues, that the same hazy notion about the quantity and the quality may still prevail. That however is merely because *Poetry* knows poetry and some of us do not. We only think we do. Our conception of poetry is wrong.⁴³

That the readers are wrong about poetry, “any one can see at a glance,” the article continues, when reading H.D.’s “The Garden” which the article reprints in full, followed by the assessment: “That’s good, as Polonius would say. –It is clear; a child could tell from reading it what the heat had done to ‘H. D.’”⁴⁴ The article continues with a reprint of “Dogmatic Statement,” in full, *in reverse order*:

But could the writers, we have been looking upon in our crass ignorance as poets achieve that! Certainly not! Nor this, either, by the sweet singer, Ezra Pound, who calls it “Dogmatic Statement Concerning the Game of Chess”:

Blocked light working in. Escapes. Renewing of contest.

Clash, leaping of bands, straight stripe of hard color,

⁴³ “Poetry,” *The Indianapolis News* (11 March, 1915): 6.

⁴⁴ *Ibid.*

Whirl! Centripetal! Mate!
 King down in the vortex,
 [.]
 Striking the board, falling in strong "L's" of color,
 Red knights, brown bishops, bright queens.

To be sure, we have taken a slight liberty with Mr. Pound's charming poem. We have set it down backward the last line first. But it came handier that way, and it reads quite as well, which proves, of course, the possession of a virtue that never for a moment was in the grasp of such men as Tennyson and Browning. They had it not. And this leads us to observe that it is high time such antiquated relics of the dead past of literature should be ruled out of schools. Why burden the young mind with the infantile, formless prattle of an antique Browning when we can get in Poetry the sublime, modern, Imagist verse of the master artist Ezra Pound?⁴⁵

Apparently the war content of "Dogmatic Statement," when it was excerpted from *Poetry's* pages, was missed by readers outside of Pound's circle, and the poem's immediate legacy was that of an Imagist abstraction, so divorced from consequential meaning it could be inverted and still "read quite well."⁴⁶ "Actaeon" escapes the *Indianapolis News'* satire perhaps because it seemed to contain far more content,

⁴⁵ *Ibid.*

⁴⁶ Someone, probably Monroe, must have sent Pound the clipping. He was as dismissive of their fun as they were of his poetry. In a letter to Monroe on April 10, 1915, Pound writes:

The rural sarcasm of Indianapolis: dear editor must have been smoking cigarettes illicitly. Has discovered the old trick of turning the picture upside down. Thoughtful man. Future before him. (Pound, *Letters*, 101)

and was more aware of the perils of war than “Dogmatic Statement” at first glance attests. Despite its bright, crisp images, “Actaeon” ends in a “silent cortège” reminding us that the march to and from war is that of a funeral procession. And our hero, “Actaeon; / Actaeon of golden greaves!” who leads us into this war, is nevertheless a man who is eventually torn apart by his own dogs.

Pound’s early war poems, “Dogmatic Statement” and its fellow poem “The Coming of War: Actaeon,” perhaps shroud the real violence of World War I in the aestheticized modes of Imagism/Vorticism. Each is dominated by images of light and clean geometric figures; one is steeped in the anachronism of ancient battles, and the other casts its soldiers in the abstraction of chess pieces. Each poem presents a battlefield—one inhabited by the “High forms” (line ten of “Actaeon”) of gods, the other the lower forms of royalty. Neither poem seems to reference the real soldiers of a war that they purportedly reflect, though as K. K. Ruthven notes, there is “possibly a submerged comparison between Actaeon (metamorphosed into a stag and then killed) and the men who are metamorphosed into soldiers.”⁴⁷ But it is perhaps the context created within the pages of *Poetry* in March, 1915 that lead “Dogmatic Statement” to be discounted as war poem, and characterized as simply (and ironically), “sublime, modern, Imagist verse.”⁴⁸ How could a reader in 1915 miss, for example, the resonances between Pound’s line, “Whirl, centripetal, mate, King down in the Vortex” and the still quite recent assassination of Archduke Franz Ferdinand, heir to the Austro-Hungarian throne, gunned down in Sarajevo on June 28, 1914, and the consequent chain of events that would whirl through Europe in

⁴⁷ Ruthven, *Guide*, 53-54.

⁴⁸ “Poetry,” 6.

July and August, drawing all major European powers into the vortex of world war?

The second printing of “Dogmatic Statement” provides a better context in which to read it as a war poem. Following very closely after the printing in *Poetry*, “Dogmatic Statement” appears a second time in the second volume of the Vorticist journal *BLAST*, the “War Number,” in July, 1915. It is my contention that the poem was composed not in isolation, nor for *Poetry*, but specifically for *BLAST*, inasmuch as it was avowedly Pound’s statement of poetic Vorticism, and because the poem’s status as a war poem made it a fitting piece to open Pound’s contributions to the “War Number.” *BLAST* II was delayed “due to the War, chiefly; secondly to the illness of the Editor [Wyndham Lewis] at the time it should have appeared and before.”⁴⁹ It is likely, then, that Pound either gave the poem to Monroe’s *Poetry* through a solicitation for new work or out of a desire to get the poem out faster while waiting for *BLAST* II to go to print.⁵⁰

“Dogmatic Statement” participates in the visual, political, and rhetorical registers of the “War Number” as a whole—the chessboard is a field of battle alive with combatants. The pieces are soldiers “holding lines” “falling” in, “clashing,” “cleaving,” “embanking,” moving in “bands,” perhaps even listening to the rallying cry of bands. The poem models the clashes between many layered oppositions: static image vs. dynamic mechanics; game vs. play; dogmatic statement vs. theme for a series; inert angularity vs. unbounded centripetal force; Euclidean vs. non-Euclidean geometry. One might also expect this particular use of the war-game of chess to be

⁴⁹ Lewis, “Notice to the Public,” in *BLAST* II, 7.

⁵⁰ If Pound indeed desired to get the poem out more quickly this may also be due to the war, as the poem appeared in a war-related context (with “Actaeon” in *Poetry*) in both publications, though to a different degree.

an allegory of some other, realer, battle. But despite the bevy of conceptual oppositions at play within the poem, the setting of the poem in the battlefield of the chessboard, and the war-time context of the poem's composition, we have no ordinary sense of there being two clear military opponents within the poem; there are no clear lines drawn between the "sides" of this war. While this may appear as a failing of the poem to measure up to the reality of the war, it is precisely this lack of the black-and-white that constitutes the poem's critique of the First World War and demonstrates, for the literary historian, the conspicuous ambivalence of the modernist non-combatant.

Writing about war-time modernist poetry, Leon Surette notes:

The First World War was not a war in which it was easy to identify evil with one side and good with the other. The propaganda of the combatants certainly portrayed the other side as evil, but when the shooting ended, it was not at all clear where the burden of virtue lay.⁵¹

Lewis' editorials which directly precede Pound's poems in their "War Issue," though arguably full of Vorticist propaganda aligning allies England and France with Vorticist art against German romanticism, play very ambiguously along nationalist lines when it comes to actual combat. There is no clear ideological winner for Lewis; even as he criticizes Germany and offers scant hope for the Allies, he is arguably as critical of Great Britain in *BLAST* II as he and his co-editors were in *BLAST* I. The modern accumulation of war machines contributes to Lewis' inability to see any future outcome of the impending war that will define the sides against each other:

⁵¹ Leon Surette, *The Modern Dilemma: Wallace Stevens, T. S. Eliot, and Humanism* (Quebec: McGill-Queen's University Press, 2008).

“The deadlock of equal armaments, countless quantities of men, etc., makes the European War a failure.”⁵² For Lewis, the failure of the war is a failure of definition; war is as an undifferentiated mass of death and waste, mud and blood. The colors red and brown dominate the essays and poems of the entire issue of *BLAST* II. The “waves of blood”⁵³ and “multitudes of drab and colourless uniforms—these, in their turn covered with still more characterless mud”⁵⁴ of Lewis’ editorials seem echoed in the red knights and brown bishops of the opening line of “Dogmatic Statement.”

The first line of “Dogmatic Statement” immediately undercuts the “black and white” opposition between good and evil. The expectation of a chess “opening” is a first move by white, followed by a second move by black. The opening of the poem instead introduces a triad of pieces in the colors of red and brown: “Red knights, brown bishops, bright queens.” Though a red and brown chess set isn’t difficult to imagine, the not appropriately oppositional color brown “clashes” with the red by nature of their similarity. That clash may mimic the clash of battle, but muddies the metaphor of good and evil presented in the typical white-vs.-black chess field, paralleling Pound and other non-combatant artists’ view of the war as a conflict with no clear winners, no cleanly identifiable ideological lines in the sand, only the muddy spread of death and waste. The third piece, and break in the pattern of color adjectives, further undermines a two-combatant structure, reflecting, in fact, the situation of the First World War as European nations entered the war out of synch.

In the *BLAST* II printing of “Dogmatic Statement” the poem is preceded by a

⁵² Lewis, “The European War and Great Communities,” in *BLAST* II, 15.

⁵³ Lewis, “Editorial,” in *BLAST* II, 5.

⁵⁴ Lewis, “The Six Hundred, Verestchagin and Uccello,” in *BLAST* II, 25.

small, poetic epigraph:

"O bright

"Swallow with a white

"Belly and black back,"

*etc.*⁵⁵

This epigraph or variations of it do not appear in any other Pound text, though a "swallow" will appear again in *The Cantos*. The lines may be nothing more than a Poundean flourish—a haiku-treatment of a Dante-like tercet. T. S. Eliot will use a "game of chess" in *The Waste Land* not too long after *Blast II*, and just a few lines from the end of that long poem Eliot will reference the most famous use of the words "O swallow," Tennyson's poem-within-a-poem, the "O swallow Flying South" song sung in his own long poem, "The Princess." It is possible that Pound's "O bright / Swallow" is alluding to the same. But it is particularly interesting that Pound's epigraph before the chess poem juxtaposes white and black while those colors are absent from the pieces and the board of his extended image of the game of chess. The swallow, "bright" like the queen in his opening line, supplies the Manichean image instead, with its white belly and black back, but with irony; it is an image of simultaneity and intimacy rather than of stark opposition, and the "etc." that implies this image is nothing but a platitude, that this partial ode could go on but we've heard it before, there is nothing unique or in fact definite about this image, this war. The bright swallow's black and white coat is itself muddied by its association with the platitudes of war poetry.

⁵⁵ Pound, "Poems By Ezra Pound [Header and Epigraph]," in *BLAST II*, 19.

It is a mistake to think of Vorticist compositions as ahistorical, overly abstract, content-less experiments, such as the *Indianapolis News* does in its inverse printing of of “Dogmatic Statement.” Despite eschewing the romantic tendencies they saw in contemporary representational models, Vorticist compositions aimed precisely at methods wherein abstraction and content were not antithetical. As Wyndham Lewis writes in *BLAST* II:

A Vorticist, lately, painted a picture in which a crowd of squarish shapes, at once suggesting windows, occurred. A sympathiser with the movement asked him, horror-struck, “are those not windows?” “Why not?” the Vorticist replied. “A window for you is actually a window: for me it is a space, bounded by a square or oblong frame, by four bands or lines”⁵⁶

While Lewis privileges lines and form over representational content here, representational meaning is not exiled from the Vorticist composition. Pound’s “Dogmatic Statement,” though on the one hand a square frame bordering a picture of language in motion, on the other, is also a war poem. Just as the square is also a window, “Dogmatic Statement” is a verbal rendering of abstract shapes *and* a reflection on the war. It is precisely the poem’s abstractions that comment on the war as a non-combatant Vorticist “sees” it—as a spectator, not a player in the game but an audience member watching the game play out. The second issue of *BLAST* seems aware of *The New Age*’s critique of the movement’s alleged abstractions, in which the editors called the first issue of *BLAST* “incomparably feeble” once “compared with the war” which so quickly followed its publication. Lewis also calls

⁵⁶ Wyndham Lewis, “A Review of Contemporary Art,” in *BLAST* II, 44.

out the inadequacy of “war verse” after the war had begun, but takes a different tack—embracing the abstract as perhaps the only possible avenue for a non-combatant to comment on the war. In his essay, “Artists and the War,” he writes:

The dearth of “War Verse” or good war literature has another reason. The quality of uniqueness is absent from the present rambling and universal campaign. There are so many actions every day, necessarily of brilliant daring, that they become impersonal. Like the multitudes of drab and colourless uniforms—these in their turn covered with still more characterless mud—there is no room, in praising the soldiers, *for anything but an abstract hymn*. These battles are more like ant-fights than anything we have done in this way up to now⁵⁷

To the non-combatant observer there is a difficult tension between wishing to praise the soldier and yet remaining critical of the political motives of the First World War. Even the actions of “brilliant daring” on the part of individual, humanized, soldier become abstracted, impersonalized, “more like ant-fights” to the observer, given his distance from the actual trenches as a non-combatant and those actions being known only through the interference of nationalist media.

With no clear black and white differentiation between sides in this war, the concreteness of individual action on the part of soldiers is “muddled” by the ideological standstill between nations in the trenches. Absent the rhetoric of the “universal campaign” (that is of combatant propaganda), the writer has no way of getting at this concreteness of the individual soldier, other than to write “abstract

⁵⁷ Lewis, “The Six Hundred,” 25. Emphasis mine.

hymns.” Pound’s is such an abstract hymn; “Dogmatic Statement” demonstrates the way in which combat, abstracted from the blood and disease of the trenches, can appear chivalric, even beautiful. But this is the sinister side of this war; fought for dubious reasons and with no clear heroes, the war is nothing but a chess game, and the soldiers, even as “light potentialities” (Pound) with “brilliant daring” (Lewis), turn out to be ants or chess pieces, ultimately not in control of their own movements, but rather in service to potentially corrupt rulers who treat them like pawns.

It is in this way that the chess metaphor from Pound’s “Through Alien Eyes” (in 1913) evolves into the chess metaphor in “Dogmatic Statement” (of 1915). The metaphor is reductive in both cases, even potentially insensitive, by aestheticizing war and abstracting soldiers into chessmen. But whereas in 1913 Pound’s use of the metaphor is in service of showing his personal disinterest and detachment from a game played by nations, in which we are to look on the folly of the players, his 1915 poem invites the reader to think not about players (that is, nations), but about the pieces (that is, individual soldiers). Before the war, flippantly pacifist Pound presents the idea of war as merely a chess game. During the war, Pound begins to see the insidiousness of this metaphor when actualized: to an outsider, non-combatant witness the war appears to be being played like a chess game, a game of numbers where nations fight for economic prominence, at great sacrifice of ordinary lives. The abstraction of the poem calls attention to the rhetoric of the war that in fact performs the same upon the soldier, abstracting individual soldiers into numbers, the scenes of barbarism and loss of life into tallies, aggression against

other lives into the abstract shapes of war diagrams, graphs, and maps. When, in 1915, the *Chicago Tribune* wrote that “the war of nations has discovered the poverty of language,” the editor called attention to how the barrage of war-reports focused on the numbers of men and the moves of the forces, missing a true representation of the war:

[War] beggars the language and feeble scribes merely set down that Russia mobilizes 1,280,000 men; that the British fleet sails for parts unknown; that mobs fill the streets of Berlin; that Holland is under arms; that all Belgium is in its fortresses; that the French are ready to move; that the Austrians are across the Servian border, etc., etc.

Only one journalist has filled the canvas. The *Cedar Rapids Evening Gazette* grabs a Titan’s brush:

“Blood Mad Monarchs Prepare Dread Sacrifice. Fifteen Million Are Facing Death. Royalty Forces Wreck and Ruin on Fated Lands. Conflagration of Long Dreaded Conflict Threatens Europe as Stubborn Rulers Play Subjects as Pawns. Fighting is Reported.”⁵⁸

Again, the “etc.” is used to signal that we’ve seen this all before. Just as Pound’s epigraph to “Dogmatic Statement” reminds us that we have enough odes to chivalric warfare (“O bright swallow!...etc.”), the editor here implies we’ve had enough words on the war to describe the numbers of combatants still in play, the moves on the world’s chessboard. What has “filled the canvas,” is instead a focus on the *pieces* in play. The kings and queens on the chessboard who “prepare for dread sacrifice” of

⁵⁸ “War, as Editors See It,” 21.

the pawns and knights are “blood mad monarchs,” “royalty forces” wrecking and ruining the rest of the board, “stubborn rulers” playing their subjects “like pawns.” These are the stories not often being told; instead, amidst all of the death of pawns at the hands of kings, in its own form of the “etc., etc.,” is the media, rendered in the passive voice: “Fighting is Reported.”

World War I marked a paradigm shift, a military revolution with conflict on a scale never experienced in all previous wars. Analysis of the “endgame” of WWI during the interwar period determined the shape of combat in WWII, where the technologies and strategies tested in WWI, such as new artillery, aerial bombardments, and new styles of communications, became the blitzes and strategic bombings and the use of signal and radar intelligence in WWII. The new technologies of information in this second war heralded an improvement in strategy such that it seemed the moves of matched civilizations would be limited, and a clean solution and clear victor obtained. But the logical paradox of war games prevailed: like the story of the grains of wheat on the chessboard, despite the seeming limits of war confined to a logical grid, there was unexpected exponential growth—an impossible heap of bodies, an un-remittable price. While WWI was supposed to be the “war to end all wars,” it instead provided a shift in the militarist paradigm and produced the new era of Clausewitz’s total war, a war without end, escalation without limit. In *The Cantos*, Pound develops his theory of the main causes of war and cultural barbarism. In contrast to the containment of “Dogmatic Statement,” the length and complexity of Pound’s project in *The Cantos* matches the new paradigm of “endless war,” and grapples with representation of the world system on a

complex scale. In the interwar period and during World War II, Pound's writing becomes increasingly political, and his use of the chessboard metaphor reflects an interest not so much in the players (nations) or the pieces (soldiers) but in the complex workings of the political and economic system, which Pound sees as interdependent.

While Pound's prose texts in the teens were not short on unreserved, dogmatic opinions, and his involvement in the manifestos of Vorticism certainly had political edges, Pound's political writing matured after the First World War, as he moved from taking the position of an outside commentator to seeing himself as a potential player on the world scene. Many critics mark the First World War as the end of Pound's early period, and a shock to his assured outsider/agitator composure. As Cooper writes:

The jingoism, political stupidity, profiteering, blood-drenched sacrifice of so many young men and women including several of his closest friends and colleagues stunned Pound. He would never really recover his composure after the catastrophe. Indeed his interest in economics and the question of social and political order emerged during the war as a way of understanding both how Europe could have descended into such barbarity and what one could do to prevent it in future. It was difficult to imagine in 1918 that an even more stupefying barbarism lay ahead.⁵⁹

The death of Gaudier-Brzeska indeed stunned Pound, and marked a turning point in the subject matter of much of his work. Though he would anger some by including

⁵⁹ Cooper, "Pound Before Pisa," 448.

his own aesthetic manifestos in his 1916 tribute to Gaudier-Brzeska, the text attests to Pound's beginning to turn from axioms of autonomous aesthetics to statements of social and political importance.⁶⁰ *Gaudier-Brzeska: A Memoir*, Pound's 1916 book devoted to the French sculptor and to their mutual project, Vorticism, opens:

We may take it as an axiom of ethics that no nation has any longer the right to make war of offence against any other.⁶¹

This concern for ethics, and for "social and political order," would dominate his prose articles during the interwar period and World War II, including his infamous radio broadcasts, as well as provide much of the content for *The Cantos*. In a 1962 interview with Donald Hall for *The Paris Review*, Hall notes this shift in Pound's concerns from aesthetic to political questions:

I know you consider monetary reform the key to good government. I wonder by what process you moved from aesthetic problems toward governmental ones. Did the Great War, which slaughtered so many of your friends, do the moving?⁶²

Pound's response points back to his 1913 attitude in "Through Alien Eyes" and his

⁶⁰ A *New York Times* reviewer called Pound "an advocate of the most advanced and eccentric form of Imagisme and vers libre" and claimed "Mr. Pound diminishes the value of his memoir by including a number of his own pronouncements on the subject of sculpture and of art in general" (71). Overall, the reviewer assessed, "there is, indeed, too much Pound in the book and too little Gaudier-Brzeska" (71). *The Nation's* review also found that Gaudier-Brzeska "deserves a better fate than to be maundered about by an unvenerable *Imagiste*" (73). Both reviews can be found in *Ezra Pound the Contemporary Reviews*, ed. Betsy Erkkila (New York: Cambridge University Press, 2011).

⁶¹ Pound, *Gaudier-Brzeska*, 1.

⁶² Donald Hall, "Ezra Pound, The Art of Poetry No. 5," *Paris Review* 28 (Summer-Fall 1962): < <http://www.theparisreview.org/interviews/4598/the-art-of-poetry-no-5-ezra-pound>>

pieces for *New Age*, but with an important addition:

The Great War came as a surprise, and certainly to see the English—these people who had never done anything—get hold of themselves, fight it, was immensely impressive. But as soon as it was over they went dead, and then one spent the next twenty years trying to prevent the Second War. I can't say exactly where my study of government started. I think the New Age office helped me to see the war not as a separate event but as part of a system, one war after another.⁶³

This reflection, on the other side of World War II, of war as not a single, discrete event but part of a “system, one war after another” is one of the main arguments of the political discourse of *The Cantos* and serves as a key to understanding its structure, which puzzled readers and critics. When Pound began writing what would become *The Cantos* in 1915, he referred to the project, in a letter to his father as “my big long endless poem that I am now struggling with.”⁶⁴ *The Cantos*, published between 1917 and 1969, work together on the principle of sequentiality rather than unity—that is, as part of a system and one after another—rather than on the principle of the discrete unit that characterizes Pound's earlier poetry. As *The Cantos* unfold and evolve over the decades after the First World War, Pound's “big long endless poem” attempts to bring together disparate historical, political, mathematic, and aesthetic elements into a complex whole. Pound starts to see economics, war, and art operating together in a complex system; in order to

⁶³ *Ibid.*

⁶⁴ Quoted in Ronald Bush, *The Genesis of Ezra Pound's Cantos* (Princeton, NJ: Princeton University Press, 1976), 75.

understand how this system works and how he, and we, must act within it, Pound continues to seek out axiomatic statements, ideas he finds to be historical and economic truths. But ultimately he cannot make *The Cantos* cohere, and they develop a more sophisticated understanding of the difficulty in establishing clear boundaries to a system than his early poetry exhibited. In working with the notion of a system in *The Cantos*, Pound ultimately finds that no maxim, axiom, formula, or model will work if it is predicated on the idea of getting *outside* of the system.

The figure of the chessboard and its relation to war and mathematical thinking in *The Cantos* can anchor a discussion of Pound's movement away from the reductive mode of the early poetry to the more systemic mode of *The Cantos*. *The Cantos* contradicts our commonplaces about modernist poetry—such as its aesthetic autonomy or ahistoricism—by incorporating larger-scale issues such as economics, governance, and the role of culture, and including meditations on war as an unending system. Pound's conversion from the smug "perspicacious" outsider to an uneasy non-combatant expatriate can be traced through the slight changes in his use of the chess metaphor in "Through Alien Eyes" and "Dogmatic Statement." We can, in fact, continue to follow the legacy of the chess metaphor alongside Pound's engagement with mathematics into the radio broadcasts and *The Cantos*, where the very possibility of taking an autonomous "outsider" position on world affairs is shown to be folly. Chess, math, and war will appear again in *The Cantos*, a text begun during the First World War and continued through the Second, during which Pound finds himself drawn into the conflict, no longer able to maintain the position of a spectator. The changes in Pound's poetic response to war are coeval to and

interrelated with the evolution of his mathematical engagement: whereas war in “Dogmatic Statement” is a discrete, geometrical puzzle with a simplified algorithm, Pound’s epic hero, like Odysseus, will cast about in an unstable world, unable to cling to foundational axioms, instead building more elaborate theorems based on Pound’s evolving theories of what constitutes historical and economic truths.

In the cantos of the teens and twenties Pound hovers above history, much like he hovered above the chessboard: chronicling the artifacts of civilization at a level of an organizing intelligence, bringing himself into the poem only in using the half-masks of historical and mythical figures like Sordello, Odysseus, Sigismundo Malatesta, and others. These cantos are ordered by Pound’s ideogrammic method, the juxtaposition and compression of mythic, historical, and linguistic sources. In the mid-twenties and thirties Pound’s interests shift to more overtly political and economic concerns, and the increasingly economic/social aspects of these cantos are in stark contrast to the possibilities for order he saw in the two poles of “KUNG and ELEUSIS”⁶⁵—that is Chinese history and pagan myths—and to the grandeur of the Renaissance princes and troubadours in the earlier cantos.

The cantos of the thirties carry a different axiomatic spirit from the aesthetic potentialities of the ideogram—rather than establishing continuity between varying pieces of culture through mythic order, these cantos tend to focus in on individual figures and their maxims (Thomas Jefferson, John Adams, Adam Smith, and C. H. Douglas among them). Peter Makin claims that in the politically motivated cantos of the thirties “the method of *The Cantos* moved from ‘ideogram’s openness to the

⁶⁵ Ezra Pound, *The Cantos of Ezra Pound* (New York: New Directions, 1993), LII/258.

squeezing of slogans out of history read by program.”⁶⁶ This may be true, but it is only through these cantos that Pound comes upon principles that he feels have the best hope of unifying the seemingly disparate elements of *The Cantos* as a system. As Michael Alexander notes, Canto XLV, the infamous usura canto, is “perhaps the clearest and most cogent statement of principle in the poem.”⁶⁷ “The radical integrity [in the sense of coherent or unified] Pound finds between economics, the life of the arts, craft, nature, procreation and religion is nowhere more startlingly announced,” he writes.⁶⁸ It should be noted, however, that it is in these cantos, and in the political writings and radio broadcasts contemporaneous with them, that Pound’s political invective is most shrill, and his demeanor the most unhinged. The harshest examples of Pound’s anti-Semitism appear in these cantos, namely canto L, containing a diatribe against Vienna’s “embastardized cross-breeds.”⁶⁹ While usury’s evil may have provided Pound a fitting axiom for the mechanics of the world political system, this belief gathered up all aspects of his poetic and political project, spreading its axiomatic spirit not only over *The Cantos* but his view of humanity. No account of the “axiomatic” in Pound’s discourse can, or should, elide the fact that one of the few uses of the term “axiom” in Pound’s work appears in perhaps the most unconscionable passage of the radio broadcasts, number 51, from July 2, 1942:

AXIOM. Against an organized force of four or more, probably EIGHT million, a hundred individuals can NOT prevail until ORGANIZED. The sporadic efforts

⁶⁶ Peter Makin, ed., *Ezra Pound’s Cantos: A Casebook* (Oxford: Oxford University Press, 2006), 11.

⁶⁷ Michael Alexander, *The Poetic Achievement of Ezra Pound* (Berkeley: University of California Press, 1979), 178.

⁶⁸ *Ibid.*, 179.

⁶⁹ Pound, *Cantos*, L/247.

of a few excited young men are no use. The dilettante velleities of a few theorists are of NO use. And the rest of the inhabitants of the United States can organize on ONE basis only, namely, that on which Europe has finally been constrained to organize its rebellion against the pervasive, the ubiquitous Yidd.⁷⁰

It is hard to cleave to an opinion that Pound merely repeated anti-Semitic clichés when we have documentation of such a call to “organize.” And herein we see the trajectory of Pound’s “axiomatic spirit” follows in the 1930s and 1940s, how the faulty logical connectives between his critique of financial corruption and his attitude toward race, sparingly visible in *The Cantos* but largely evident in the radio broadcasts, constitutes an irrational and excessive application of economic axioms to a social framework.

For the first few years of the forties all writing on *The Cantos* ceased. Pound was too busy being a political writer to be a poet, the main output of this period being his ill-conceived radio broadcasts. The two cantos he produced in 1944, the Italian Cantos, were written in Italian and have been mainly dismissed by critics as propaganda for the Mussolini forces. Mid-decade his role as a hectoring propagandist in the radio broadcasts landed him with charges of treason for having supported the enemy in wartime.

When writing on *The Cantos* resumes in the *Pisan Cantos*, Pound is now tasked with modeling the system from inside the system. He is inserted into world events not only as a political and poetic writer, but also through his incarceration in

⁷⁰ Ezra Pound, *Ezra Pound Speaking: Radio Speeches of World War II*, ed. Leonard W. Doob (Westport, CT: Greenwood Press, 1978), 188. Hereafter referenced as “Radio.”

Italy in 1945. It is at this moment that Pound returns to the image of the chessboard, rejecting it as an image of order for the cantos that will follow. When we come upon the chessboard in the *Pisan Cantos* it is “too lucid [. . .] the squares are too even”⁷¹ to fit the context of perpetual war fueled by bad mathematics—particularly the faulty axiom of classical economics, equilibrium theory.

Approaching mid-century, economists, and social scientists more generally, were becoming keenly aware of the faults of equilibrium theory to describe the complex dynamic systems presented by social phenomena. The version of equilibrium theory from nineteenth-century classical economics of which Pound, Douglas, and others were critical assumes that the law of supply and demand will naturally set prices that keep economies in balance, with purchasing power in line with production costs and market values. This theory relies on a number of conditions that don't always exist in complex markets, such as the concept of complete information. Complete information is much like a chess game, where each player can see the moves of the other. Pound, for one, argued that the moves of players in the world economic game were not transparent to all, and the figure of the chessboard in his economic writings and *The Cantos* attests to this interest in moving past equilibrium and complete information game models toward an analytics that could describe more complex systems. The revolution in mechanics presented by relativity and quantum mechanics in the earlier part of the century set the stage for all branches of science to examine their mechanical paradigms. In many sectors of thought there was a revolt against “classical” and “orthodox”

⁷¹ Pound, *Cantos*, LXXVIII/497.

models. Many of the emerging sciences and revised paradigms relied on a refined, twentieth-century concept of a system. While the study of systems dates back to antiquity, the complexity, sensitivity, and contradictory behaviors of modern systems, such as the international financial market, required mathematical modeling not adequately addressed in classical theory. In finding the rules, patterns, and laws that might govern these systems of interrelated phenomena, there was a general move away from classical and foundational logic, such as proof-based formal systems based on simplistic axioms and hostile to contradiction. While probably not on Ezra Pound's radar, it's worth noting that game theory, developed out of an interest in mathematically modeling the game of chess, is one of the crucial innovations in mathematical modeling involved in the twentieth-century development of complexity science.

From the outset of *The Cantos*, Pound's epic is attuned to history as a system, a web of relationships among aesthetic, political, and social phenomena, and his composition is aimed at revealing the patterns which emerge from the data of history. But it's the radio broadcasts of the 1940s and the cantos from that period that attest to a particularly keen interest in the concept of the system, attempts to explain the mechanics of said system, and the sinister threat of the system. Before examining the chessboard and system in the *Pisan Cantos*, we should note a few instances in the radio broadcasts where Pound speaks of games and systems, which will illuminate the stark change from the chessboard of "Dogmatic Statement" to the chessboard of *The Cantos*.

Though pro-Mussolini, Pound's radio broadcasts were a far cry from an

organized piece of the Axis propaganda machine. Pound used his own name and did not purport to represent anyone but himself. Pound's broadcasts covered subjects of his own interest and expounded on his own (often extreme) political views, which only tangentially fell in line with party doctrine. Unfortunately, though the only substantial generic commonality between official Axis propaganda and Pound's broadcasts was an idealization of Il Duce, Pound's views and his shrill expression of them did share the rhetorical hyperbole and real bigotry of fascist propaganda. And Pound did feel the broadcasts were of immense political importance, especially in exposing the sinister mechanics of the world economic system.

In radio broadcast number 90 (May 23, 1943), titled "Soberly," Pound lays out the way in which the "system" of international "usury," which he also calls a "game" is "not pretty, it is not a very safe game."⁷² He employs an extended analogy between the "real" and immediate danger of Russian aggression and the threat of the more inchoate international financial system. "YOU are threatened" Pound intones, punctuating this claim in a very-out-of-character moment of agreement with Winston Churchill, a surprising (for Pound) strategy for establishing ethos. But Pound and Churchill allegedly agree on one thing: "The mass graves at Katyn surprised NO one."⁷³ Pound is referring to a series of mass executions of Polish nationals by Soviet Union police in 1940. The government of Nazi Germany had, at the time of this radio broadcast in 1943, just announced the discovery of the mass

⁷² *Ibid.*, 319.

⁷³ *Ibid.*

graves.⁷⁴ Pound uses the Katyn massacre as an immediate, brutally real, and arresting image for his listener to compare at once to what he saw as the equivalent danger of the international system of usury, the main topic of his radio broadcasts. The threat of Russian “methods” (for which Katyn stands as a synecdoche for Pound) is “not your sole danger,”⁷⁵ he continues, moving to the topic of usury with almost no transition, so strong is the equivalence, in Pound’s estimation, of the mass grave to the threat of usury on the entirety of world citizens:

It is, in fact, so far from being your sole danger [. . .] Usury has gnawed into England since the days of Elizabeth. First it was mortgages, mortgages on Earl's [sic] estates; usury against the feudal nobility. Then there were attacks on the common land, filchings of village common pasture. Then there developed a usury system, an international usury system [. . .] That system gave you your slums. [. . .]

The usury system does NO nation good, it does no nation any good whatsoever. It is an internal peril to him who hath, and it can make NO use of nations in the play of international diplomacy save to breed strife between them and use the worst as flails against the best.

It is the usurer's game to hurl the savage against the civilized opponent.

⁷⁴ Pound applied to the German government for a visa to travel to the site of the Katyn massacre when the German government invited the Red Cross to investigate the graves in 1943. Pound’s use of the massacre in his radio broadcast mirrors the aims of the German government in bringing the Red Cross to the scene, both attempting to show Americans what their Russian allies were capable of. Pound was denied help for his travel by Germany, however, as by this time Pound was apparently widely regarded as trouble by Axis and Allies alike.

⁷⁵ Pound, *Radio*, 318.

The game is not pretty, it is not a very safe game.⁷⁶

For Pound, the “usury system” is also a “game.” In this game, nations are not actually in control of their economic, diplomatic, or military forces: rather, the system makes use of the “nations in play of international diplomacy” and that use is to “breed strife between them and use the worst as flails against the best.” Unlike the beauty of “Dogmatic Statement,” this game is “not pretty.” And unlike the parlor room safety of the abstract game of chess, this game has consequences for the entire world system.

A month later the metaphor of the “game” appears again in Pound’s broadcasts against the “system,” in the form of a checkerboard. In broadcast number 103 (June 29, 1943), titled “Communist Millionaires,” Pound again stresses that the “game” is not being played by individual nations squaring off against one another on the “international checkerboard”—rather the banking system is a complex system that scales up from the financial policies of nations to international politics. And that system, which starts at home, is pulling the strings, rather than a given evil nation: “And this question of who CONTROLS the central; of who wingles the wangles is of importance. There is no need to transport the problem onto the international checkerboard.”⁷⁷ And for Pound part of the problem is that the banking game, as he

⁷⁶ *Ibid.*, 318-319.

⁷⁷ *Ibid.*, 356. In another broadcast, Pound brings up one of his letters from 1935 in which he enjoined university students to “start where you *are*. Don’t let anyone wriggle out of LOCAL honesty, by talking internationally [. . .] When you find out why they avoid the study of the *economic* causes of war, you’ll be part of the way toward preventing another” (65). Fascinatingly, Pound’s call to examine the structures at home, rather than or at least before projecting matters onto the “international checkerboard” echoes a passage from a “Foreign Affairs” column in

understands it, is operating on classical paradigms unfit for the century and unfit for the common good. He refers to the banking “game” in conjunction with a nod to J. M. Keynes, a figure often compared to Einstein in terms of his paradigm changing economic ideas:

The bank game is simple, it is run on what are called classic lines. It is run on what Lord Keynes, the British proletarian specialist, used to call the lines of ORTHODOX economics. Meaning that the bankers collect 60% interest on the actual money, or that they collect interest on 90% of everyone’s money, which they create out of thin air, mild⁷⁸ phantasy, and a few bits of engraven paper.

The New Age from 1911, which points out similarly flawed reasoning in neglecting analysis of home policy before foreign policy and uses a chess analogy:

I myself have always held that, when the foreign affairs of a nation are under consideration, they will be better appreciated if those who are dealing with them are familiar with the trend of their *internal* political and sociological thought. This is not saying that the home politics of a country are more important than its foreign politics; for, as I endeavoured to show a few weeks ago, they are not. The greater includes the less. Any statesman who can multiply up to twelve times twelve may be presumed to have sufficient ability to multiply up to six times six. Foreign politics are home politics cubed. Home politics are a game of draughts; foreign politics a game of chess. (S. Verdad, “Foreign Affairs,” *The New Age* 8.17 [23 February, 1911]: 387)

Though written under the editorial pseudonym “S. Verdad” (*es verdad* meaning “it is true” in Spanish) the author was not likely Pound, who began writing for *New Age* in November of 1911, months after the February, 1911 article. But the echo between the article (which Pound very likely read) and the radio broadcast provides more evidence of the connection as well as the evolution of Pound’s thought from the early works to the later works, and buttress the claims of other scholars, particularly Tim Redman, who has persuasively made the case in *Ezra Pound and Italian Fascism* (Cambridge: Cambridge University Press, 1991) that it is in his “British intellectual milieu” that Pound begins connecting anti-Semitism and usury, “not in the Italian milieu he later inhabited” (17).

⁷⁸ It is likely this is a misprint of “wild”; it is printed as “mild” in the standard Doob edition, but the *Internet Archive* edition, though based on the Doob text, uses “wild.” The *Internet Archive* edition can be found here: <<https://archive.org/details/EzraPoundSpeaking-RadioSpeechesOfWorldWarIi>>.

OH, that they vary the currency, the purchasing power of money. When the bankers have money, it is of very great value, and you have to pay for it thru the nose. But when you get a bit of it, its value evaporates. *The game is as old as Aaron, it was denounced in the time of Thucydides.*⁷⁹

Throughout the broadcasts, Pound critiques the very idea of there being “two sides” in any of these negotiations. In Pound’s estimation, all bilateral relations between nations are simply the usury system using nations “in play” of diplomacy as he claimed in the “Soberly” broadcast. Throughout the radio broadcasts, Pound references a complex and insidious system of financial manipulation as the cause of war. It is the complex system of modern history, of which the world banking system is a subset, that Pound sought to represent in the complexity of *The Cantos*. The radio broadcasts in Italy contain no less than 236 iterations of the word “system,” most often used non-neutrally; that is, while Pound sometimes discusses the “American system” or the “fascist system,” when “system” appears without such modification, on its own, often in all capitals, it is the broken economic system as he sees it. It is telling, then, that when it is modified, it most often appears in conjunction with the word “usury.”⁸⁰

⁷⁹ Pound, *Radio*, 356-57. Emphasis mine.

⁸⁰ My number is based on an informal search of the *Internet Archive’s* e-text. The Doob edition of the radio speeches includes more thorough quantitative analysis. The texts of the radio speeches are followed in Doob’s volume by four appendices in which Doob has provided quantitative content analysis based on certain themes and references. Though there is significant overlap, qualitatively, across many of Doob’s identified themes, the most useful in thinking about Pound’s attitude toward “systems” would be “Social Structure” (which Doob sub-defines as “*General*: the society as a whole, its way of life, the system” and “*Specific*: desensitization, embezzlement, any criticism”). The “Political Systems” theme of course could also be pertinent, but is generally specific to communism, Nazism, etc. (Appendix 1; 414).

In broadcast 103 Pound dismisses the figure of the “international checkerboard” as the heuristic for understanding this “system,” the current state of political affairs. The board fails as a metaphor for understanding the complex relationships among nations. That said, Pound did pursue a simple, axiomatic, and what he thought of as “obvious” way of understanding these complex relations, and fixing them. In Pound’s writing in the 1930s and 1940s, in his radio broadcasts and in the *Pisan Cantos*, he returns again and again to C. H. Douglas’s “A + B Theorem” as an axiomatic heuristic for the problem facing the world system. Pound’s resolute sense of the simplicity of the “banking game” lead his sense of economic truths to be largely dismissed by the economics community as well as the larger intellectual community. His political and economic ideas are now similarly rejected, though in that case the lion’s share of the blame goes to the connection of his discourse to his indefensible anti-Semitism. Just as Pound, with some accuracy, appreciated the complexity of the financial system and its relationship to war, he accurately appreciated the complexity of historical experience and tried to represent it in *The Cantos*. Paradoxically, however, and in both cases, as Pound began to view the world with a sophisticated understanding of its complexity and precarity, he nonetheless sought to find a simple method for coherence. He doggedly pursued the idea that the axiom he had gained from C. H. Douglas was a means of giving a simple analysis to the banking “game,” just as he hoped for, but failed, to find a mechanism that would reduce the complex system of modern history to simple coherence in *The Cantos*.

According to Doob’s analysis, general social structure (which we may understand as “the system”) appears in 76% of Pound’s broadcasts. If we include general *and* specific structures, social structure appears is thematic to 91% of the broadcasts. See Doob’s tables in Appendix 2, particularly Table 1 (420-421).

The Cantos confront a different mathematics than the contained chessboard of “Dogmatic Statement” or the closed circle of Pound’s early interest in analytical geometry. In attempting to represent the massive numbers in war profiteering, financial speculation, mass death, and the exponential growth of debt, Pound was forced to abandon the more simple equations of basic geometry and the strictures of imagism, in favor of a poetic form which could accommodate the infinite number of combinations of relationships produced in a contemporary world in which details could be quantified in billions rather than in single units. We can see this shift by comparing Pound’s use of chess to reflect on war in “Dogmatic Statement” to Canto LXXVIII, from the *Pisan Cantos*, in which Pound returns to the chessboard to work through the “*casus bellorum*”—the cause of wars.⁸¹ The common Latin phrase, popularized by 18th century writers, is actually *casus belli*—the more abstract “cause of war,” specifically an act or event that is used to justify war. Pound’s use of *bellorum*—the plural rather than singular genitive of war—changes the phrase to the cause of wars, plural, and reminds us of this notion of endless war, war upon war. The light and movement of the chessboard in “Dogmatic Statement,” which proved unequal to the dark mud of the bloody standstill of the trenches in World War I, is given another stark contrast in the exhaustion of the endless journey to nowhere in the opening of Canto LXXVIII, written during WWII:

By the square elm of Ida

40 geese are assembled

(little sister who could dance on a sax-pence)

⁸¹ Pound, *Cantos*, LXXVIII/502.

to arrange a pax mundi

Sobr' un zecchin'!

Cassandra, your eyes are like tigers,

with no word written in them

You also have I carried to nowhere

to an ill house and there is

no end to the journey.

The chess board too lucid

the squares are too even...theatre of war...[sic]

“theatre” is good. There are those who did not want

it to come to an end⁸²

Mount Ida, that landmark of the Trojan War, is a strange setting for a campaign for world peace (“pax mundi”). The assembly is a farce, of course—made up of geese. Pound⁸³ is attended by the Trojan prophetess Cassandra, at once a muse and a double for Pound. Just as Cassandra’s prophecies were dismissed as madness, Pound, too, was ignored when, in the interwar period he sought to persuade to U.S. politicians through a letter writing campaign (and a trip to the U.S. in which he attempted, but failed, to meet with any) that there would be “one war after another” if there were not significant economic reforms. The chessboard of “Dogmatic Statement” may be the referent of “the chessboard too lucid” in Canto LXXVIII. In a

⁸² *Ibid.*, LXXVIII/497.

⁸³ Here and throughout *The Cantos* we will take the speaker as Pound for ease, though the degree to which a canto is autobiographical varies throughout, and of course there is not a simple correspondence or relationship between the speaker and the person Ezra Pound.

“theatre of war” where one is a spectator, the squares seem even, discernable, the moves lucid; all is light and transparent. But the geometry of “Dogmatic Statement” is not adequate to the reality that Pound has now seen, in both wars, in which the endless war, the war which the powers that be did not want to “come to an end,” exceeds the squares of the chessboard. Pound reflects that civilization is an “ill house” and there is “no end to the journey” toward resolution of the social and economic problems that lead to endless war.

Arrested in May 1945, Pound was no longer a spectator in this theatre of war, nor could he hover above the chessboard. He found himself in his own “theatre of war”—the Mediterranean Theatre of Operations, United States Army, Disciplinary Training Centre near Pisa (referred to as the DTC). The even squares of the chessboard are transformed into the harlequin pattern of the metal fence in the open-air, unroofed cage where he was initially kept in isolation at the DTC. Sleeping on a concrete floor, exposed to the elements, subjected to unending light (both daylight and night floodlighting from perimeter searchlights, shining through the wire fence) his cell was indeed “too lucid.” The five-by-five-inch poem of his past proves a devastating and unanticipated preview of his six-by-six-foot cage at the DTC, where he was held, a captured pawn in a game of war.

Though in the *Pisan Cantos* Pound’s style becomes the most overtly autobiographical, with earlier cantos aiming at a more objective presentation of history, Pound early on begins to weave himself into the project, to see himself as a player on the world scene. Critics have pointed out how Pound turns inward in the *Pisan Cantos*, wading through personal memories. We might then expect less of the

“dogmatic statements” we are accustomed to expecting from *The Cantos* up to that point. Michael Alexander claims that this turn to the personal reduces the quantity of maxims:

a result of the rigours of confinement and the trauma of disillusionment is that over-writing and preaching almost disappear; even the Ecclesiastes castigation of vanity is chiefly directed against himself. Not that Pound is ever without maxims; but they are personal, not soap-boxing⁸⁴

Alexander is correct that maxims *become* personal for Pound in these cantos, but we should note that the soap-boxing continues throughout. In the *Pisan Cantos*, Pound’s references are more directly autobiographical, but all the other pieces of *The Cantos* remain in play. Canto LXXVIII acts as a kind of microcosm canto for all the preceding cantos, drawing together all their central themes: virtuous rulers, elements from the *Odyssey* and other major source texts for Pound’s epic, Chinese history, figures from Italian and U.S. history, personal memories of Pound’s friends and family, the tenets of the social credit theory for economic reform, the economic bases of war, and, indeed, the anti-Semitism that discolours *The Cantos*.

Whereas in the cantos of the 1930s Pound holds forth on individual theories of the problems of civilization at length, and quotes from figures such as Douglas and Adams at length, in the *Pisan Cantos* the discourse is compressed. The boundaries between Pound’s voice and the voices of others is blurred, and the relations between each actor in the system are conveyed as more interdependent. The outsider perspective on war and economics from Pound’s early prose and

⁸⁴ Alexander, *Poetic Achievement*, 202.

poems like “Dogmatic Statement” is no longer functional. While the chessboard in “Dogmatic Statement” was “alive with light” the chessboard in Canto LXXVIII, representing the world scene of economic machinations, is “too lucid.” Pound now sees—clearly and tragically, he feels—the true cause of war, as reflected in a refrain throughout the radio broadcasts: “wars are made to make DEBT.”⁸⁵ Whereas in “Dogmatic Statement” light is an output of individuals’ movements around the board, such movement is not afforded to individuals in Canto LXXVIII, where debt constricts movement. Pound takes issue in the canto with the state’s control over individual movement through economic systems, “that the state have vantage over private misfortune” in the form of debt.⁸⁶ Here, the state’s “vantage” is both in control and vista, standing above the chessboard, now a grid that confines its citizens as Pound is held in his cage at the DTC.

Never without maxims, Pound devotes a significant amount of words in Canto LXXVIII to replaying his take on Douglas’s theory of social credit, particularly the “A+B Theorem” introduced in Canto XXXVIII. In the earlier canto from 1933, Pound returns (as he does in many cantos) to the year World War I began, 1914. Throughout the canto, Pound collects the data of international monetary circulation in the years before WWI. He dismisses the naïve and bourgeois notion that war could be prevented by international fiscal cooperation and the leveraging of trade agreements, a sentiment parodied in the exchange: “ ‘Will there be war?’ ‘No, Miss Wi’let, / ‘On account of bizschniz relations.’”⁸⁷ He reminds his reader that “bizschniz

⁸⁵ Pound, *Radio*, 382.

⁸⁶ Pound, *Cantos*, LXXVIII/500.

⁸⁷ *Ibid.*, XXXVIII/188.

relations” in the twentieth century are bound up with the war machine, where relations between industry and governments are driven by the manufacture, stockpiling, and selling of munitions, and national and international stock prices wed to militaristic uses of raw materials: ““The wood (walnut) will always be wanted for gunstocks.””⁸⁸ The canto is populated by bankers, brokers, and corrupt politicians (such as “the secretary of something”) trading in armaments, discussing getting “some guns cheap” and which “side has more munitions.”⁸⁹ Pound adds into this group Woodrow Wilson, Andrew Mellon, and figures from British and American high society, all of which come together in the few lines before an arresting claim about WWI, forming the referent for the “they” in “That year [1914] [. . .] / they began to kill ‘em by the millions.”⁹⁰

In this flow of international capital, manipulated by banking systems and powerful individuals, Pound locates the *casus belli*, a spring fed by a simple mathematical inequality at the heart of capitalism, described best by his economic hero, Clifford Douglas, in the A+B Theorem. Opening Canto XXXVIII with a passage from the *Paradiso*, Pound reminds us that his paradise, which he never quite reaches in *The Cantos*, is a just civilization with sound economic policy. In Canto XXXVIII paradise is the clarity, the light, and the axiomatic truth of Douglas’s theory of social credit:

A factory

has also another aspect, which we call the financial aspect

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*, 188, 187.

⁹⁰ *Ibid.*, 188.

It gives people the power to buy (wages, dividends
 which are power to buy) but it is also the cause of prices
 or values, financial, I mean financial values
 It pays workers, and pays *for* material.
 What it pays in wages and dividends
 stays fluid, as power to buy, and this power is less,
 per forza, damn blast your intellex, is less
 than the total payments made by the factory
 (as wages, dividends AND payments for raw material
 bank charges, etcetera)
 and all, that is the whole, that is the total
 of these is added into the total of prices
 caused by that factory, any damn factory
 and there is and must be therefore a clog
 and the power to purchase can never
 (under the present system) catch up with
 prices at large,

and the light becomes so bright and so blindin'
 in this layer of paradise
 that the mind of man was bewildered.⁹¹

This description is cribbed directly, save those last three lines, from Douglas's

⁹¹ *Ibid.*, XXXVIII/190.

description of the A + B Theorem of Social Credit. What the factory (any representative business, or “any damn factory”) pays to workers, such as salaries or “(wages, dividends / which are power to buy)” are A. What the factory incurs as costs, that is “payments for raw material / bank charges, etcetera)” is B. Adding these two together sets P, or price (“and all, that is the whole, that is the total /of these is added into the total of prices /caused by that factory”). Where the “clog” happens, that is the problem with this system, is that P will always be larger than A, in that P contains A and B. Workers cannot actually purchase the produce of the nation, “and the power to purchase can never / (under the present system) catch up with / prices at large.” Pound found the foundational formula of Douglas’s social credit theory— $A + B = P$ and thus the problem that A could never catch up with P—a paradise of clarity. But, as Surette argues, Canto XXXVIII “reflects the frustration of a man unable to convince others of the truth of a self-evident observation.”⁹² Pound raises the theorem to the level of an axiom, the obvious and self-evident; that others do not see or agree must mean that the idea is “so bright” it is “blinding” and that men’s minds must be “bewildered” by the brilliance of this logical paradise.

Again, axioms are the basic building blocks of logical or mathematical systems, a statement assumed to be true without proof. Theorems are derived from axioms and a set of logical connectives, and are subject to validation via proofs. Much of the cantos from the 1930s on contain episodes from history that are meant to validate and provide proofs for Pound’s economic arguments, based on the foundational axiom of the A + B theorem. But from the very beginning, Pound’s epic

⁹² Leon Surette, *Pound in Purgatory: From Economic Radicalism to Anti-Semitism* (Champaign, IL: University of Illinois Press, 1999), 29.

poem seems to be involved in this project of gathering proof—documents, fragments, data—for a theory of history. Surette rightly points out how Douglas’s economic theory becomes a guiding hand in Pound’s construction of a twentieth-century epic: “With Douglas’s economic analysis in hand Pound had an intellectual tool that he believed was the key to an understanding of history—a necessity for the would-be epic poet.”⁹³ Just leadership, Pound decided, was dependent on economic analysis, and a sound theory for a nation’s policy of financial credit.⁹⁴

Pound felt that if governments acted based on the existing economic axioms (“under the present system”), war was inevitable. This logical connective is made in Canto LXXVIII, when Pound returns to the subject of his interwar canto, the A + B Theorem and Douglas’s social credit theory, anew after another war has broken out:

“No longer necessary,” taxes are no longer necessary
 in the old way if it (money) be based on work done
 inside a system and measured and gauged to human
 requirements
 inside the nation or system

道

and cancelled in proportion
 to what is used and worn out
 a la Wörgl. Sd/ one wd/ have to think about that

⁹³ *Ibid.*, 39.

⁹⁴ This, in itself, does not raise ideological suspicion. Unfortunately, the culture around Douglas’s theories and social credit was one built on paranoia and anti-Semitism, both of which heavily taint Pound’s discourse in *The Cantos*.

but was hang'd dead by the heels before his thought in propositio

came into action efficiently

“For a pig,” Jepson said, “for a woman.” For the infamies of

usura,

The Stealing of the Mare, casus bellorum, “mits”⁹⁵

Casus bellorum: the cause of wars. Here Pound bookends the phrase with some romantic examples: “The stealing of the mare” is a plot from a medieval romance, where the theft of a white mare is named as a justification for a war. “Mits” refers to a popular song, sung by a DTC trainee: “my girl’s got great big tits / Just like Jack Dempsey’s mitts.”⁹⁶ This last potential cause of war being, then, a woman’s beauty—a vulgar take on the face that launched 1,000 ships. But in reflecting on the death of Mussolini, Pound offers the cause he finds most compelling throughout *The Cantos*, and the cause is economic: “for the infamies of / usura.”

The Latin phrase *casus belli* has come to mean less “the cause of war” than “the justification of war”—and this resonates with the ending of Canto LXXVIII. The canto ends with an axiom, drawn from a Confucian⁹⁷ text:

there

are

no

righteous

⁹⁵ Pound, *Cantos*, LXXVIII/501-502

⁹⁶ Carroll F. Terrell, *A Companion to The Cantos of Ezra Pound* (Berkeley: University of California Press, 1980), 421.

⁹⁷ It is drawn from *The Spring and Autumn Annals*, which is generally attributed to Confucius.

wars⁹⁸

This maxim echoes Pound's statement at the opening of *Gaudier-Brzeska*: "We may take it as an axiom of ethics that no nation has any longer the right to make war of offence against any other."⁹⁹ The statements seem nearly identical in meaning, but this is a repetition with important differences. While the statement from *Gaudier-Brzeska* is labeled an "axiom," its rhetoric somewhat undermines its role as a statement of fact needing no proof. "Ethics" and "rights" despite acting, themselves, as axiomatic bedrocks for civilized behavior, are terms that imply the complex systems which establish them: whether moral, religious, legal, or national. And, crucially, Pound claims that no nation "any longer" has the "right" to make war; that the right is *no longer* implies historical difference, that there was a point at which such a right did exist. In the axiom that finishes Canto LXXVIII, the existence of this right is negated. The statement is nominative and absolute: *there are no righteous wars*. The situation which demanded Pound's earlier axiom was the death of Gaudier-Brzeska, a loss which demonstrated for Pound that the price of war was too high. But Pound discovered in the 1940s that there was more to war than the waste and loss of the war dead; he reflects in the *Pisan Cantos* on the limitations imposed upon himself, and implicitly on the men around him, physically and intellectually. Even when he had been released from the 6 x 6 unsheltered cage, he was denied reading material, his writing censored. "Gaudier's word not blacked out," he reflects in Canto LXXVII: even Gaudier-Brzeska, fighting at the front, didn't have his letters

⁹⁸ Pound, *Cantos*, LXXVIII/503.

⁹⁹ Pound, *Gaudier-Brzeska*, 1.

heavily censored as did Pound, incarcerated as a traitor.¹⁰⁰

This change from the qualifier “no longer” to absolute negation in “there are no” parallels another echo, this time between Pound’s treatment of Douglas’s theorem in Canto XXXVIII to its slant repetition in Canto LXXVIII. Pound ends his passage on Douglas in Canto XXXVIII with a hopeful, parenthetical qualification: “the power to purchase can never / (under the present system) catch up with / prices at large.”¹⁰¹ In the 1930s, Pound felt confident that the system could be changed, and expediently, if the light of Douglas’s theories could just dawn on those with political power. During that time Pound’s writing and travel were not limited. His ideas could circulate throughout systems of power; despite his being largely ignored by the powerful in his home country, he found an ear in figures like Benito Mussolini and Arthur Griffith (founder of Sinn Fein). In early 1941, Pound’s passport was given a six-month extension, restricted so that he could travel only home to the US. When the passport expired, he was compelled to stay in Italy. In the summer of 1941, he applied to the American embassy for a passport to return to the states and was denied.¹⁰² The many Pound biographies in print do not seem to agree as to what Pound’s intentions were in terms of leaving Italy after Pearl Harbor, nor the official reasons for the restrictions and denials from the US mediated by the Italian embassy. We can notice, however, how during this time when Pound resumes the radio broadcasts his sense of “the system” solidifies, contracting in terms of dogma

¹⁰⁰ Pound, *Cantos*, LXXVII/499.

¹⁰¹ *Ibid.*, XXXVIII/190.

¹⁰² When he attempted to leave Rome in 1942 on a train with American diplomats and correspondents, he was again blocked by American officials from international travel. He had not yet been charged with a crime, but he was already on the US’s radar at least a persona non grata, if not yet regarded as an agent of Fascism.

but expanding in terms of mathematical savvy.

Throughout the radio broadcasts, the system is “decrepit” and “rotten.” But most importantly, the system is Pound’s main target, and explaining to his listeners the stakes and the scope of the system Pound’s aesthetic, political, and personal goal. Even embedded in the anti-Semitic sentiment of the broadcasts as a whole, and the vitriol of broadcast number 94, “Big Jew” (June 1, 1943), in particular, is a moment of clarity about the how individuals are bound up in a larger system: “Don’t go for the poor Jews. Don’t pick on the amhaarez. Look into the system.”¹⁰³ Despite consistently giving a racial character to the figure of corrupt economic power, even Pound inveighs against an American focus on the “Jewry” as the problem: “If you would run your own government properly. If you would think out a clean code of ethics. If you would make use of the machinery our respectable forebears bequeathed us, you wouldn’t need to be bothered with the Jewry.”¹⁰⁴ That said, Pound’s discourse veers alarmingly from measured to shrill, discerning to overtly bigoted—often within a single given sentence—throughout this particular broadcast. Even while admonishing his listener to “Look into the system,” Pound’s racist position is still clear, in his keen reminders that that system is dominated, to his mind, by “Big Jews.”

On the other side of the broadcasts, in the DTC precisely because of the broadcasts, Pound reiterates this notion of the larger system at work, in the opening canto of the *Pisan Cantos*: “but one point for Stalin / you need not, i.e. need not take

¹⁰³ Pound, *Radio*, 330.

¹⁰⁴ *Ibid.*

over the means of production; / money to signify work done, inside a system.”¹⁰⁵ That is, the focus should not be on the factories; the financial system as a whole is the problem. And crucially, we are not just “under the present system” we are “inside a system.” That is, while in the 1930s Pound’s parenthetical phrase “(under the present system)” in Canto XXXVIII indicates some potential mobility, his use of “system” in similar lines in the *Pisan Cantos* is always in conjunction with the preposition “inside,” and often nearby reflections on his own immobility. For example, right after offering the above advice to Stalin, he reflects on how Stalin, as well as other authorities he is currently meditating on in the same passage, such as Churchill and the chaplain at Pisa, are “squawky as larks over the death cells,”¹⁰⁶ an image repeated a few lines later in one of the most oft-quoted lines from the *Pisan Cantos*, Pound’s establishing shot for his wandering reflections: “from the death cells in sight of Mt. Taishan @ Pisa.”¹⁰⁷

In that sad signature in the *Pisan Cantos* Pound *places* himself in space, in history, and inside the system. He does not hover like a demigod above the history of culture, nor comment on political affairs from the position of an outsider. When he speaks of the “system” in Canto LXXVIII, it appears again, twice, in conjunction with the word “inside.” In this case Pound is referencing how he thinks things *should* work, “inside a system and measured and gauged to human / requirements / inside the nation or system.” That the system be “measured and gauged to human requirements” is a version of one of the central tenets of Social Credit theory,

¹⁰⁵ Pound, *Cantos*, LXXIV/446.

¹⁰⁶ *Ibid.*

¹⁰⁷ *Ibid.*, 447.

Douglas's poetically chiasmic axiom: "Systems were made for men, not men for systems."¹⁰⁸ But the repetition of "inside the system" in multiple *Pisan* cantos and its frequent juxtaposition to references to his being literally incarcerated demonstrate how this axiom failed to apply to all cases.

Pound's "case"—bundling together his political discourse, poetry, and life experience—is something of an allegory for the early twentieth-century failure of totalized axiomatic systems. The early twentieth-century project of finding a complete and consistent set of axioms for a formal system of mathematics, lead by David Hilbert, Bertrand Russell, Alfred North Whitehead, and others, was found to be impossible. Russell and Whitehead's attempt to axiomatize logic and mathematics in the teens depended on defining mathematical truths independent of a system and on which a system can be based. Gödel's second incompleteness theorem demonstrated that the consistency of arithmetic cannot be proved *within* arithmetic: it could only be proved by means stronger than those provided by arithmetic itself. In the same way that logical paradoxes such as the paradox of self-referentiality prevented Russell and Whitehead's formal system from operating on axiomatic statements that could be said to exist *outside* the system, Pound's work from the *Pisan Cantos* onward begins to recognize its own failures of coherence, completeness, or formal certainty, precisely because its epic hero cannot get outside of the system. The poet at the helm of the epic journey in *The Cantos* does not emerge from incarceration after Pisa—in November of 1945 Pound was transferred to the US to face the charges of treason, and was admitted to St. Elizabeth's Hospital

¹⁰⁸ C. H. Douglas, *Economic Democracy* (New York: Harcourt, Brace and Howe, 1920), 6.

in Washington, D.C. where he remained until 1958.

Pound's sense of the complexities of the system, and the paradoxes inherent in simplistic models of it, necessitate his rejection of the mathematical forms of interest in his early poetry. Despite their utility for describing the smaller pieces of the world, they failed to stand up to Pound's attempt to "make cosmos" in *The Cantos*. The lack of a defined structure in *The Cantos* reflects a shifting interest from the principle of poetic economy and determined forms to the mathematical inner-workings of *the* economy, and complex structures. Pound's own metaphor for *The Cantos's* structure is the odyssey, the periplum, the coastal voyage. And this voyage is crucially different from the A to B motion of the Metro train, or even the tessellations of the knight's tour across the chessboard. "Dogmatic Statement on the Game and Play of Chess" sits at a midpoint in this gradual shift in perspective, from bounded to unbounded, outside to inside. The logic of the game of chess is discoverable in the opening and the endgame. The opening has a limited number of possible moves, and strategy generally relies on an economic strategy, that is to say dominance through a limited number of moves. The endgame presents one with a finished transcript from which to analyze the patterns of play that determined the ending. But in the middlegame there is creativity, intuition, spontaneity; all is potential, probability. The middlegame is also changeable and unstable; tides may turn, fortunes may waver. It is of indeterminate length, and has unpredictable results. Pound's epic, beginning in medias res, does not lend itself to the discrete and economic logic of the opening, nor the clarity and completeness of the endgame.

Ultimately, the chessboard is "too lucid," and even the blinding light of the

axiomatic A + B Theorem—while still an example of Pound’s continued passion for the axiomatic—fails to give fully realized form to *The Cantos* as a whole. Pound seemed to think it might provide such in 1934, when in his essay “Date Line” he introduced the definition of “epic” as “a poem including history” and proclaimed economics the key to history:

An epic is a poem including history. I don’t see that anyone save a sap-head can now think he knows any history until he understands economics. Whether he propose to do anything, or to incite anyone else to action, he manifestly cannot understand Gibbon or Gatti’s *Dazzi e Monti* or any other collection of data and documents touching the workings, without Ariadne’s thread—the proof being that generations of so-called historians just haven’t. Wherever you find a Medici you find a loan at low interest, often at half that of their contemporaries’.

I thought in my jactancy that I had performed a *tour de force* when I reduced a contemporary economic equation to what the benevolent consider verse;¹⁰⁹ within 24 hours (twenty-four hours) I came on Dante inveighing against Phillipe le Bel for debasing the currency¹¹⁰

¹⁰⁹ It is very likely he is referring to his transcription of the A + B theorem in Canto XXXVIII here. While the *Eleven New Cantos XXXI – XLI* was not published by Farrar & Rinehart of New York until one month after the “Date Line” essay first appeared in print, the canto was certainly composed before and is the clearest example of Pound “reduc[ing] a contemporary economic equation” to verse.

¹¹⁰ Pound, “Date Line,” 86. In the interview with Donald Hall in 1962, Pound made a similar statement: “An epic is a poem containing history.” Critics tend to use these statements interchangeably, very often attributing “containing” to the earlier “Date Line” essay, which uses “including.” We could easily speculate on the potentially important differences between “including” something and “containing” something.

Pound here nominates an understanding of economics as the key to the “workings” of history, analyzed through the “data and documents” of civilization. Economic theory here is the “Ariadne’s thread.” Pound references his use of economic theory such as the A + B Theorem in the cantos when he speaks of how he “reduced” an economic equation into poetry (“verse”). And he claims that Dante was there before him, locating in one of his models for *The Cantos*, Dante’s *Paradiso*, a similar claim for the heuristic value of economic equations to understanding the working of history.

While this suggests economic theory as the Ariadne’s thread for navigating the data and documents that make up *The Cantos*, Pound acknowledges in the *Pisan Cantos* that his epic cannot rely on simple shapes or logical formulae, nor even a poet’s (namely his model predecessor’s) sense of order: “By no means an orderly Dantescan rising / but as the winds veer.”¹¹¹ This shift in perspective between 1934 and 1945 was largely due to the intervening Second World War. In Canto LIX, written just after the war began, Pound describes the ordering mechanism of his epic as the periplum: “periplum, not as land looks on a map / but as sea bord seen by men sailing.”¹¹² Here we see how Pound’s structuring metaphors in *The Cantos* differ significantly from those of his early period. The favored equation of the circle from the early essays is transformed in *The Cantos* into the non-Euclidean, deformed shapes created by Pound’s circumnavigation. The outsider perspectives of watching a chess game or looking at a journey “as land looks on a map,” is replaced by the perspective of being *in* the game, *on* the journey, *inside* the system; form in Pound’s

¹¹¹ Pound, *Cantos*, LXXIV/463.

¹¹² *Ibid.*, LIX/324.

epic is the periplum of the coastline “seen by men sailing.” Rather than simply a starting principle, *The Cantos* operate in media res from beginning to end.

Canto CXVI, the last finished canto, revisits Ariadne and the “data and documents” of history, providing a very different statement on the ability to describe the workings of the world system, that is “To make Cosmos— / To achieve the possible—.”¹¹³ This canto reflects on our attempts to find and formalize patterns in the data of history. Terms for the profusion of historical data pile up: Pound speaks of the “palimpsest,” of the “unprepared young burdened with records,” of the “mass of laws,” and a “tangle of works unfinished.”¹¹⁴ His periplum has encountered not a few obstacles and even some shipwrecks, but Pound remains hopeful that his epic, tangled, unfinished, and amorphous as the coastline, remains beautiful: “But the beauty is not the madness / Tho’ my errors and wrecks lie about me.”¹¹⁵ It appears that Pound might be retreating to poetic beauty and natural forms, and away from scientific precision and abstract forms here at the end of *The Cantos*, where Ariadne’s thread is no longer the equations of economic theory but the beauty of nature:

How came beauty against this blackness,

Twice beauty under the elms—

To be saved by squirrels and bluejays?

“plus j’aime le chien”

¹¹³ *Ibid.*, CXVI/815.

¹¹⁴ *Ibid.*

¹¹⁵ *Ibid.*, CXVI/815-16.

Ariadne.¹¹⁶

...At least, that's *one* version of the story. The return to Eleusis, retreat into beauty, and Pound's confession of defeat is a frequent interpretation of Canto CXVI in literary scholarship. But Pound's awed admiration for the complex beauty of the world is anything *but* a retreat. Notwithstanding the fact that to have succeeded in imposing coherence on a representation of experience would have required him to be a god, Pound concedes the failure of the effort without renouncing the nobility of the challenge. The beauty *is in the complexity* even though that complexity dooms the representation.

While this chapter has been at pains to describe the changes in Pound's attitude toward mathematical forms as keys to structuring poetry and understanding history, I would argue this canto, though reflective of that change, does not drop mathematics or logic in favor of beauty and contingency. Instead it brings us back to the hope and possibilities of mathematics to describe the world. It remains in the continuity of Pound's evolving mathematical sense, and parallels analogous defeat *and* discovery in twentieth-century mathematical thought.

The Spirit of Romance is a text driven by a "passion for completeness."¹¹⁷ The animating concepts from mathematics which Pound draws on in Imagism and Vorticism are the static universals of geometry, such as closed circles and limited grids, and the mathematical precision of formal logic, the communication of meaningful patterns through the distillation and reduction of phenomena into

¹¹⁶ *Ibid.*, CXVI/816.

¹¹⁷ Pound, *The Spirit of Romance*, 6.

equations. The mathematical spirit of the early poetry is one of economy—modeling aesthetic and emotional experiences in a way that is direct, precise, and reduced to only those “luminous details” that are (allegedly) necessary. The attempt at exhaustive description in studies like *The Spirit of Romance*, married with Pound’s poetic imperative for economy and penchant for equations, parallels the early twentieth-century project in mathematics and logic to model complete and consistent formal systems on a limited number of axioms.

But while Pound’s treatises like *The Spirit of Romance* and his translations of ancient texts and Chinese poetry might be said to extract axioms out of literary history, *The Cantos*, as a “poem including history” attempts to draw history into itself. Pound, too, is drawn into this complex. Following Pound’s interest from the 1930s onward in the “system,” his epic encounters the paradoxes of systems-thinking which were emerging in the early and mid twentieth century. Twentieth-century mathematicians found that a complete, non-contradictory, and yet still complex formal system requires an infinite number of axioms. Gödel, for instance, showed that handling unprovable theorems necessitated new theorems, which could not be proven, which would create new theorems, and so on. Gödel’s findings profoundly changed the horizon of expectations for mathematics and philosophy; a total purity of language and consistency of form cannot be achieved. All systems are necessarily incomplete, containing paradoxes and ambiguities even as they function. As we covered in discussion of Gertrude Stein and set theory: because symbolic systems we use to represent the universe are *part* of the universe, and our representations of the universe are an example of the system modeling itself, there

can never be a complete formal system, a complete representation, a complete understanding. The model is within the universe, in order to have a complete model, the universe would need to expand to contain it. It would have to be bigger than itself. This feeds back onto the model, which would need to contain the expanded universe to be complete. The defeat in this recursive paradox is reflected in one of the final cantos, in lines critics tend to take as Pound's final statement on his epic project "to make Cosmos": "I cannot make it cohere."¹¹⁸ Too often left unquoted, however, are the lines that *follow* later in the canto: "i.e. it coheres all right / even if my notes do not make it cohere."¹¹⁹ As George Kerns writes,

Canto 116 is not a rejection of the long poem it is concluding but a redefinition, a careful definition, of the relation between the smaller cosmos of the poem (which does not cohere) and the Cosmos it takes for its subject, about the coherence of which there is no doubt¹²⁰

Pound's epic, a model of history demonstrating the workings of a complex system of forces among art, politics, and economics, does not ultimately cohere as a formal system. But while his "notes," which constitute a system of abstract thought based on artistic principles as well as the model of mathematics, do not cohere in a well-defined formal system, there is belief that "it," the universe, coheres all right. And the project of modeling the world is achievable— if perhaps not through existing forms of logic. Pound remains the poet-as-analytical-geometer of his early days, though no longer with the energy of the axiomatic modernist of the early twentieth

¹¹⁸ Pound, *Cantos*, CXVI/816.

¹¹⁹ *Ibid.*, CXVI/817.

¹²⁰ George Kearns, *Guide to Ezra Pound's Selected Cantos* (New Brunswick, NJ: Rutgers University Press, 1980), 265.

century. And Pound nevertheless ranks *The Cantos* as a project following what the twentieth century would probably regard as the most accurate description of the scientific method: “many errors, / a little rightness.”¹²¹

Ultimately Pound in *The Cantos* “cannot make it cohere,” in part because as he admits, he is “not a demigod.”¹²² And it took writing *The Cantos* and experiencing the wars, revolutions, and paradigm shifts of the twentieth century to show Pound that he was neither a demigod nor a “perspicacious” outsider; in the smaller cosmos of *The Cantos* he is a barber who cuts his own hair. And perhaps it is precisely in his failed attempt to model a system from the outside, to explain the complex of history through a limited number of axioms, that he was able to reach the same conclusions as modern mathematics: that any non-trivial system, that is anything worthy of being called “complex,” cannot be reduced to a simple collection of axioms which could be proven consistent, that is non-contradictory, unable to derive both a statement and its denial from the system’s axioms, or in other words, “cohere.”

¹²¹ Pound, *Cantos*, CXVI/817.

¹²² *Ibid.*, CXVI/816.

Part III: Legacies of Axiomatic Modernism

CHAPTER FIVE

The Caesar Problem and the Pound Question: Modernist Authorship and Paradoxes of Self-Reference

The modernist turn in mathematical logic detailed in previous chapters, in the work of Russell, Whitehead, Wittgenstein, Frege, Gödel, and others, was prompted in large part by a concern to define the existence of abstract items such as numbers, functions, classes, and attributes. In his major publications in the last years of the nineteenth century, Frege provided the logical concepts and machinery of formalization that made Russell and Whitehead's *Principia*, and by extension Gödel's incompleteness theorems, possible. In his two-volume work, *Foundations of Arithmetic* (1893/1903), Frege attempts to resolve whether numbers are properties, classes, objects, or something else. Ultimately, Frege defines natural numbers as objects, but is at pains to prove the claim that "every individual number is a self-subsistent object."¹ In a logical system, identity depends on conditions of strict definition, and Frege struggles with granting number the "self-subsistence" required for objecthood. Frege claims that "the fact that we speak of 'the number 1'" with a definite article, grants it objecthood, and (seemingly irrefutable) statements like " $1 + 1 = 2$ " also grant 1 a definite identity.² But in mixed statements, like "the number of Jupiter's moons is the number four" or "the number of Jupiter's moons = 4," the two sides of the identity statement are populated with different kinds of objects. The phrase doesn't balance as in arithmetic, in which " $1 + 1 = 2$ " can be

¹ Gottlob Frege, *The Foundations of Arithmetic* (Evanston, Illinois: Northwestern University Press, 1980), 76.

² *Ibid.*, 69.

expressed “ $2 = 1 + 1$.” “Jupiter’s Moons = 4” does not give us the same meaning as “ $4 = \text{Jupiter’s Moons}$,” because while the phrase “Jupiter’s Moons” will, once verified, contain information about the number of its moons, “4” will never contain information about either Jupiter or moons. This is the problem of “self-subsistence” of number. Four does not seem to be *singular* enough to be a definable object. Frege demonstrates this issue through what he calls the “Julius Caesar Problem”:

we can never—to take a crude example—decide by means of our definitions whether any concept has the number JULIUS CAESAR belonging to it, or whether that same familiar conqueror of Gaul is a number or is not.³

That is, an account of numbers as objects—objects independent of our ways of thinking about them— must provide a complete definition of number that can distinguish people, or any other definable object, from numbers. In analytical logic, the Julius Caesar Problem is usually given in the shorthand—“Julius Caesar = 2”—an absurd equation that cannot, in common sense, be true, but is suggestive of a problem of identity and entity in logical expression. We might dismiss this equation as absurd or unintelligible because we assume persons and numbers are well-understood categories, and “Julius Caesar” and “2” are of radically different types; they cannot possibly be equated. But we must remember that logic depends on our being able to assess the truth or falsity of a given expression. If existence is predicated on a principle of identity—that is, A is A , in the Aristotelian sense—can a number be an entity without an identity, when 2 is not only equal to itself (just as A is A) but equal to the numbers which add up to itself? And what *is* the difference

³ *Ibid.*, 68.

between the entity Julius Caesar, of whose identity we seem very sure, and the number 2, of whose ontology we are unsure? Can they be said to be the same kind of object? Frege solves this problem by theorizing that numbers are objects by nature of being extensions (2 is an object because it is a set, the collection of all pairs). They are then a *kind* of object, a different kind of object than a singular subject like Julius Caesar. For most of us, the truth or falsity of “Julius Caesar = 2” isn’t particularly important, as in the everyday we assume numbers work by nature of their position in an overall structure, the language of arithmetic, and thus are not dependent on a cohesive ontology for mathematical concepts. But for Frege, Russell, and others, completing a whole, axiomatic, formalized framework for mathematics and/or logic depended on closing the loop on these questions of definition, identity, and ontology. It is from Frege’s proposals for arithmetic’s axiomatic roots in pure logic, after all, that Russell’s “Barber Paradox,” as we discussed in Chapters One and Two, first arose.

At the turn of the century the logicians and mathematicians of modernism struggled with the ontology of number, expressed in the question of whether 2 as an object can have entity in the same way as Julius Caesar, a subject. Definitively explaining away any possibility of equating an individual, organic, seemingly indivisible and irreducible identity (Julius Caesar) with a multiple (the number 2), relies on a defining the special ontology of different classes of objects—persons and numbers. This problem was put most famously by Willard Van Orman Quine in the 1950s in his famous imperative “no entity without identity.” From Quine’s

ontological axiom it follows that we must have clear identity criteria, based on individuation, in order to postulate the existence of something.

Mid-century, literary criticism faced its own Caesar Problem in crafting foundational axioms to make literary evaluation logically sound, a project which necessitated special, separate ontologies for author and for text. But the ontology of the text, expressed in the notion of aesthetic autonomy, was threatened by the existence of the subject—the author. Modernist works were crucial to the effort to establish a new literary consensus for aesthetic formalism in the 1940s, and yet the literary critic of modernism faced a critical puzzle in treating the modernist work as an autonomous, isolated, text when confronted with the high volume of poetic theory and political discourse produced by modernist poets.

Like “ $1 + 1 = 2$,” the problem of authorship and its relation to the text are in no way new. But the modernist period witnesses laborious and contested interrogations of the logics of seemingly simple statements, like “ A is A ” or the words “By Ezra Pound,” partly because in the cases of Gertrude Stein and Ezra Pound, the modernist writer—whether a genius, a madman, an impostor, or a bigot—was an inconvenient figure for mid-century criticism, and supplementary explanation was needed to assert the value of his or her work. This chapter will examine negotiations of modernist authorship in the cases of Ezra Pound and Gertrude Stein. These two cases offer a larger picture of the legacies of axiomatic modernism in shaping public and critical opinion of modern art and in steering the discipline of literary studies, where the project of providing logical foundations to literary study and criticism required re-negotiating age-old logical connectives

between author and text. Closing the loop on literary interpretation in the criticism of the 1930s and 1940s, in particular, necessitated establishing special, and separate, ontologies for author and for work. What emerges from that negotiation is one of the most vital legacies of axiomatic modernism, a fundamental principle in our critical discourse to the present day, wherein the paradoxes threatening formal systems actually bring into being our best hope for a founding axiom of interpretation: the text as a self-referencing object.

The second half of this chapter considers the case of Pound, where justification of his work's value involved separating author from text as a way to bury his biography. In the case of Stein, the subject of the first half of this chapter, audiences and critics followed an inverse strategy; supplementation was typically drawn from her biography, consolidating author and text, in order to combat the seeming "unintelligibility" of her writing. In what follows, I consider the evolution of Stein's "Caesar Problem" through her own explorations of the identity of the artist and the entity of the art-work, and how her theories of authorship were shaped by popular response to her work after her sudden success in the 1930s.

Caesar Onestone / Mr. Einesteine / OneStein: Poetic Identity

At the top of the outside cover of one of her manuscript notebooks for *Sentences* (1928-1929), scrawled in pencil in Gertrude Stein's messy cursive hand, are two names, one on top of the other: "Caesar Onestone" and "Mr. Einesteine" (A and B). Below, along with doodles, some sums, a few lines from the text of *Sentences* and the word "button" repeated three times, are iterations of both names, another of

Mr. Einesteine (C) and two uses of Onestone (D and E). Underneath the bottommost appearance of Onestone, in an awkward print rather than cursive: "OneStein" (F).⁴

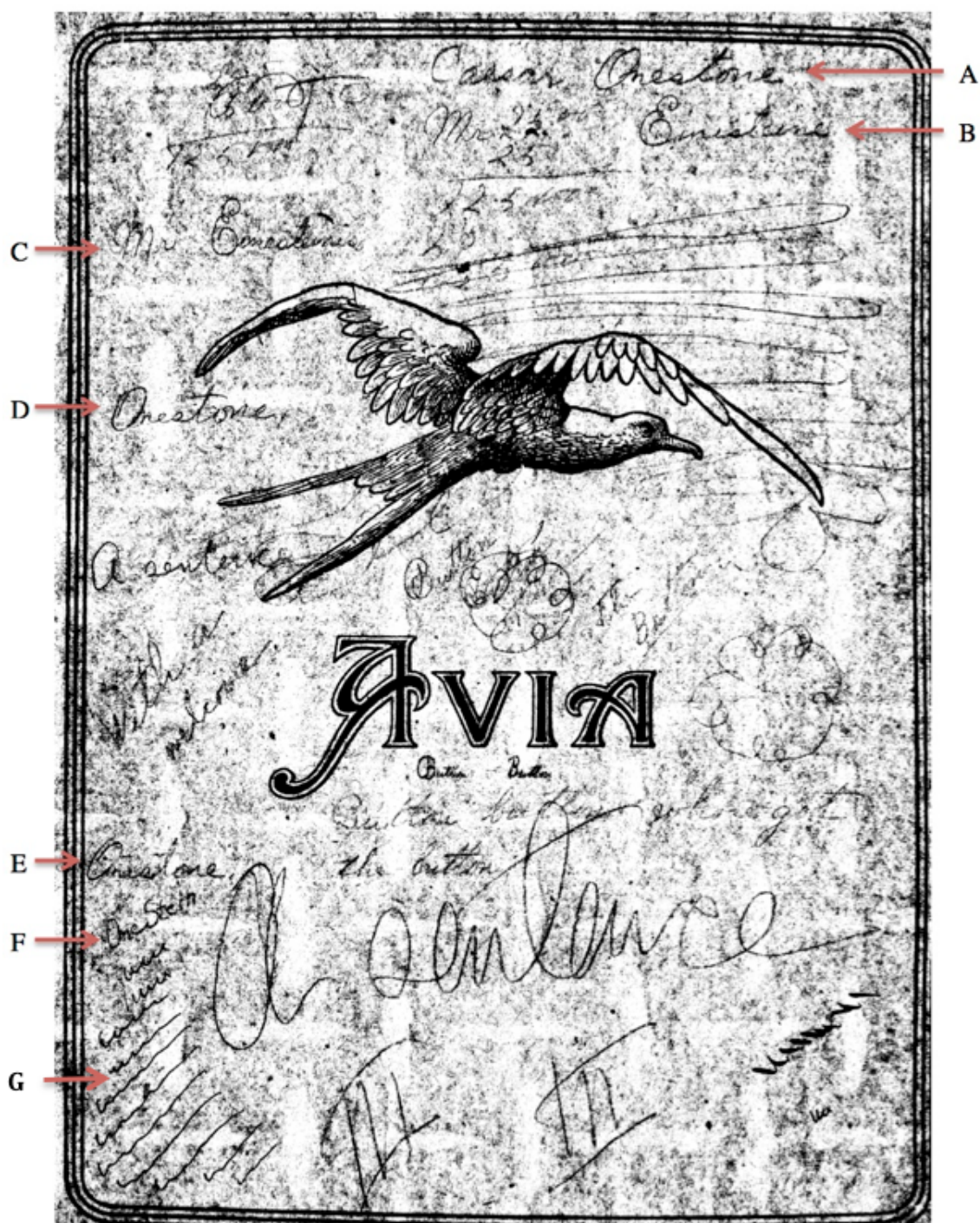


Fig. 1. Outside cover of Gertrude Stein's notebook for Sentences (1928-29)⁵

⁴ What follows (G) are simply writing-like doodles.

The portmanteau word “OneStein”⁶ sketches an historical continuum consisting of historically singular pillars, or stones—cultural icons Julius Caesar, Albert Einstein, and Gertrude Stein. Accidental as their discovery may be, I believe we can use these names as anchors for an investigation into negotiations of authorial identity, by Stein herself, her artistic milieu, and her various audiences, pre- and post-publication of *The Autobiography of Alice B. Toklas*. While at first we may take Stein’s “Caesar Problem” as a struggle to individuate herself artistically, to assert an identity on the level of the historical singularity Julius Caesar, a different problem emerges in the 1930s, when the monumental celebrity of the Einsteinean

⁵ “*Sentences*: Manuscript Notebook [Outside Cover]” [1928-29], Gertrude Stein and Alice B. Toklas Papers, Yale Collection of American Literature, Beinecke Rare Book and Manuscript Library, Yale University, YCAL MSS 76, box 71, folder 1300. *I have filtered the image to make the writing more legible.*

⁶ Though other scholars have noted “Caesar Onestone” and “Mr. Einesteine,” the character of “OneStein” remains unmentioned in existing scholarship. In *A Stein Reader*, Ulla Dydo refers to the name-play thus:

On the inside cover of a notebook for *Sentences* (1929), Stein played with two words, two names—or perhaps it is one:

Caesar Onestone

Mr. Einesteine (2)

Curiously, Dydo references the *inside* cover of the notebook, rather than the outside, though on the mauve inside page of the notebook only “Caesar Onestone” appears (see figure 2) and Mr. Einesteine is absent. The third, first-nameless figure of OneStein does not appear in Dydo’s citation. The question of Stein’s Einstein-ing herself would seem to be more concretely answered by noting the quadruple translation among the four elements: Einstein to Einestiene to Onestone to OneStein, an observation which would indeed bolster Dydo’s reading of the significance of the names to Stein’s overall poetic project: “No time, no space, no center, standard, or authority. Stein wrote in a world changed by Einstein and even more by Heisenberg and Schrödinger. She knew she was one of them, constructing for words what they had constructed for quantum mechanics” (3). Subsequent critics who’ve noted Stein’s play on Einstein here cite Dydo’s secondary text, rather than the original notebook, thus leaving “OneStein” out. But “OneStein” as the paradoxically singular conflation of three—Gertrude Stein, Ein-stein, and Caesar (Onestone)—can help assert what Dydo merely implies: that Stein *knew* she was one of them, not only by “constructing” like Einstein but also by conquering, like Caesar.

Stein, unintelligible genius subject to intense veneration and suspicion from American audiences, interferes with Stein's and our own ability to productively separate the "entity" of the art work and the "identity" of the creator.

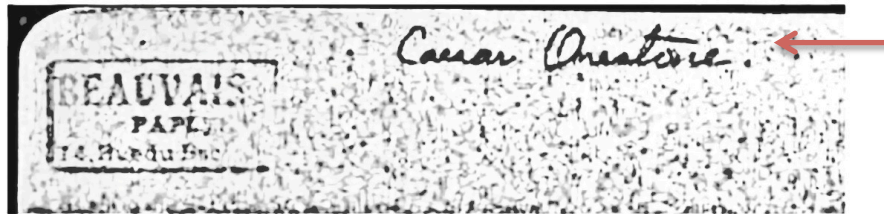


Fig. 2. Inside cover, Stein's notebook for *Sentences* (1928-1929)⁷

While Stein and Einstein share a sonic resemblance by nature of their surnames, a fact not lost on Stein herself or the American popular press in the 1930s when both Stein and Einstein became celebrities on their respective American lecture tours, "Caesar Onestone" does not at first seem to play as clear a role within Stein's triumvirate structure. Allusions to classical antiquity are far less apparent in Stein's work, when she is compared to other modernist writers such as Ezra Pound or Guillaume Apollinaire. But Julius Caesar, his legend, his writing, and even his haircut, appear directly and indirectly in a large variety of Stein's texts, her friends' portraits and descriptions of her, and her own self-fashioning. Caesar (sometimes also lowercase, sometimes plural), as a historical figure or figment of wordplay, can be found throughout Stein's body of work, particularly in what is called her "Middle Period" (1910-1931), prior to the fame she garnered upon the publication of *The*

⁷ "Sentences: Manuscript Notebook [Inside Cover]" [1928-29], Gertrude Stein and Alice B. Toklas Papers, Yale Collection of American Literature, Beinecke Rare Book and Manuscript Library, Yale University, YCAL MSS 76, box 71, folder 1300. *I have filtered the image to make the writing more legible.*

Autobiography of Alice B. Toklas.⁸ Though subsequent examples will show Stein invoking the Caesar of Caesar's own historical writings, her penchant for layering historical and cultural meanings in a given word or phrase in a single utterance proves equally true for many of her references to Caesar, who is at once antiquity's Caesar, the titular character of Shakespeare's *Julius Caesar*, the subject of a powerful visual and literary culture,⁹ the Caesar of school-book Latin grammars and logical syllogisms,¹⁰ and of course a figure of Stein's linguistic and sexual play (Caesar as "seize her"). The focus of my examples will, however, be Caesar as a conqueror of

⁸ For example, there are iterations of Caesar throughout the works composed from 1910-1922 collected in *Geography and Plays*, in "Lifting Belly," "Guillame Apollinaire," "Today We Have a Vacation," "A Sonatina Followed by Another," and "An Elucidation." This list is not, of course, exhaustive, and we should also note that Caesar, while more prominent in the middle period doesn't disappear entirely, as *Everybody's Autobiography* (1936/1937) weaves the names "Stein" and "Caesar" together again in pseudonymous characters "Madame Caesar" and "Miss Steiner."

⁹ Caesar's *Gallic Wars* is known for being written in such plain Latin prose that is often assigned to schoolchildren learning Latin, and Stein's *The Autobiography of Alice B. Toklas* is similarly understood as a "primer" for reading Stein, in its choice of plain, simple, prose. Interestingly, she recasts Caesar's opening lines in "Mildred's Thoughts" (1922):

Do you believe in Gaul. All Gaul is divided into many parts. Each one is a department. Beffa is going away to another. And the Caesars. God bless the Caesars. (Dydo, *A Stein Reader*, 368).

We should also remember that Caesar is one of the most famous memoirists, and both he and Stein write memoirs in "voices" other than their own: his *Gallic Wars* is the preeminent example of using a third-person narrator in memoir writing, Stein's is a rare example of narrating an "autobiography" in the voice of a specific person (Alice).

¹⁰ In her time at Radcliffe, Stein took the "Caesar Examination" in Latin, consisting of 40 lines of the *Gallic Wars* and managed to pass, though long after her coursework was complete, and despite being uninterested and not particularly studious in her Latin, which she needed in order to take her degree and go on to medicine at Johns Hopkins (see *Gertrude Stein Remembered*, ed. Linda Simon. Lincoln, NE: University of Nebraska Press, 1994: 12). The Caesar Examination was standard protocol for most degrees at universities on the east coast at the time (see *One Hundred and Third Annual Report of the Regents, University of State of New York Albany*: James B. Lyon, State Printer, 1890).

nations, both through military means and through becoming a transcultural touchstone; this use of Caesar resonates with Stein's associating herself with grand historical figures and counting herself among the few "geniuses."

In *For the Country Entirely: A Play in Letters*, Stein explicitly engages how "Caesar," name or person, figures a seemingly universal cultural reference—this is why, for instance, his name serves such a fitting example for Frege in the *Foundations* when he compares the singularity "Julius Caesar" to the questionable entity "2." Caesar is, in the beginning of *For the Country Entirely*, presented as a stand-in for the concept of reference, or association, as a cross-culturally recognized historical example:

There is no use in pointing out associations. A great many people can read.
Not women. Not in some countries. Not in some countries. Oh yes not in some
countries.

Caesar.¹¹

Caesar appears, singular and upper case, in a line alone and severely indented, seemingly in a reference to "the" Julius Caesar. The name acts as an example of an association that the "great many people"—literate (and culturally literate) people—would not need pointed out to them. But this generalization is challenged even before we get to Caesar by the complication of gender and national identity: "Not women. Not in some countries." Nevertheless, Caesar appears as potentially an answer to this conundrum, perhaps as a singularity capable of overcoming the

¹¹ Stein, *Geography and Plays*, 228.

obstacles of class, nationality, gender, and so on: an example of a singularity that is, then, universal. But that singularity is again undercut in the next lines:

[Caesar.]

Caesar isn't a name that is not used. I have known that a great many people have it.

Henry Caesar. A class is full and teaching is difficult. They do not understand.

Who does not understand. The Barcelonese.¹²

The double-negative (“isn't [. . .] not used”) implies the assumption that Caesar is singular before rebuffing it by converting Caesar the man to Caesar the name. This evidence is presented as perhaps second-hand and possibly suspicious, in that the speaker has known “that” a great many people share the name, not actually known a great many. That general claim is then given a more concrete example in “Henry Caesar,” a Caesar who is anglicized, much like “Caesar Onestone.” Henry Caesar is perhaps even an English teacher (if the “Barcelonese” are a “who” and the “they” of the classroom). This indicates the tension between general and particular in the play; the title, “For the Country Entirely,” suggests a singular country of reference, yet the play consists of letters from writers in and of many nations. That the name Caesar belongs to many countries is presented as evidence that the name both is, and is not, a rarity, that it is, and is not, a singularity. The making mundane of Caesar in the figure of schoolteacher Henry Caesar figures the tension between universality and place, general and particular, at play in the “letters” and “countries” in the text.

¹² *Ibid.*

Caesar appears in another letter-like address in *A Circular Play: A Play in Circles* (1920): “Dear Caesar I am always willing to wear Caesars. Not down or away but stay.”¹³ “Stay” is a characteristic verb Stein uses when referencing her artistic or historical peers; for example, partway into *Matisse, Picasso, and Gertrude Stein* (also known as *G.M.P.*):

They stayed when they stayed. They all stayed when they stayed. They all respected what they said when they said what they said. They all said what they said. They all stayed.¹⁴

Knowledge and artistic production are here rendered in the past tense in the echoing pair “they said” and “they stayed.” These phrases imply that the ideas belonging to the “they”—Gertrude, Matisse, and Picasso—have “staying power,” and that, though the “all” may indicate a larger public, there “respect” is individualized and possibly exchanged only among the three. This echoes something Stein would say later, before the publication of *The Autobiography*, about the ideal of endurance, or staying power, of writing: “I am writing for what will endure, not for a public. Once you have a public you are never free.”¹⁵ Stein’s juxtaposing the “I” of the text with Caesar in *A Circular Play*, uses “stay” in a similar fashion as in *G.M.P.*, but this time also in terms of spatial proximity (not away, but stay), prefigured in the intimacy of “Dear” Caesar, the opening of a letter/address as well as a gesture of familiarity, even, conceivably, condescension. “Dear Caesar” is uninterrupted by the

¹³ Stein, *A Circular Play*, in Dydo, *A Stein Reader*, 331.

¹⁴ Stein, Gertrude. *Matisse Picasso and Gertrude Stein, With Two Shorter Stories* [1911-12] (Toronto: Dover, 2000), 205.

¹⁵ Gertrude Stein, “Grant or Rutherford B. Hayes,” in *Americans Abroad: An Anthology*, ed. Peter Neagoe (The Hague: Servire Press, 1932), 418.

comma expected in an address, and the singular, is transformed to “Caesars,” the plural, or perhaps possessive. “Dear Caesar I am always willing to wear Caesars” calls to mind the fashioning of Stein herself after Caesar, in her texts as well as in her personal style in her later life. In her style of living and writing, Stein refutes authority while also “trying it on.” Despite the well-worn cultural imperative to obey many and discrete authorities—“Render therefore unto Caesar the things which are Caesar’s; and unto God the things that are God’s,”¹⁶—Stein is “always willing to wear Caesars.”¹⁷

The character of “Caesar Onestone” on Stein’s notebook cover constitutes an example of “wearing Caesars,” that is, Stein fashioning herself a Caesar in her own time, as an “imperial singularity” as Ulla Dydo glosses “Caesar Onestone.”¹⁸ In one of his many prefaces to the second edition of *Caesar’s Conquest of Gaul: An Historical Narrative* (1899), Thomas Rice Holmes describes Caesar as “the strongest personality that has ever lived, the strongest which poet or historian, painter or

¹⁶ *The Bible*, King James Version, *Project Gutenberg*, Matthew 22:21. Note that the jarring grammatical shift between “which” and “that” is in the original. Stein, interestingly, makes a similar division in “What is English Literature” when she asks whether in writing one can serve “god and mammon” or need serve one or the other—that is one mode of writing might be said to serve a higher power (typically in Stein’s writing this is not “god” as such in the religious sense but the philosophical purity of “human mind” and entity) and another mode of commercial writing, for money (Stein, *Lectures in America*, 12).

¹⁷ This is not the only pairing of Caesar and clothing in Stein’s work. “Jonas Julian Caesar and Samuel” was written in 1923 for Yvonne Davidson, the sculptor Jo Davidson’s wife, a clothing designer. Dydo claims in *Gertrude Stein: The Language that Rises* (Evanston, IL.: Northwestern University Press, 2003) that in this poem Stein “explores the wish to be seen by the right people” (67, fn. 21). Davidson sculpted a portrait of Stein in 1922-23 in which he chose to depict her as a “modern Buddha.” Davidson also famously sculpted Einstein.

¹⁸ “Imperial singularity? Einstein Englished? Stein herself, as an Einstein with a feminine -e added to the masculine Mister (half-rhyming with Caesar)? A stoneware stein for beer? A stone’s weight?” (Dydo, *A Stein Reader*, 2).

sculptor has ever portrayed.”¹⁹ Scholar Matt Miller claims that Stein “stalwartly refused to recognize literary peers,” allowing “comparison only to figures important to other areas of artistic and intellectual endeavor,” protecting her “provisional singularity” by “creat[ing] elaborate smokescreens often involving some highly suspect claims.”²⁰ Stein herself actively encouraged her own reputation as a strong personality and would claim she was one of the few “geniuses,” that her art was singular, vanguard, and only comparable to other arts (painting), other geniuses (Picasso, Alfred North Whitehead, Einstein). This attitude did not escape the notice of some modernists who notoriously disliked Stein—among them Wyndham Lewis, Ezra Pound, T. S. Eliot, and Robert McAlmon. In 1926, Pound sent on to T. S. Eliot a mocking “commentary” on Stein, written by McAlmon, which parodied Stein’s alleged boasting by attributing to her the statement: “Yes, the Jews have produced only three original geniuses: Christ, Spinoza, and myself.”²¹ While this statement is apocryphal, *The Autobiography of Alice B. Toklas* offered an, if not more modest, at least not explicitly blasphemous, equivalent:

I remember once coming into the room and hearing Bernard Faÿ say that the three people of first rate importance that he had met in his life were Picasso, Gertrude Stein and André Gide and Gertrude Stein inquired quite simply, that

¹⁹ Thomas Rice Holmes, *Caesar’s Conquest of Gaul: An Historical Narrative* (New York: The Macmillan Company, 1903), xxvi.

²⁰ Matt Miller, “Makings of Americans: Whitman and Stein’s Poetics of Inclusion,” *Arizona Quarterly* 65.3 (2009): 39.

²¹ This “quote” has been wrongfully attributed to Stein herself. Possibly because Pound initially sent it to Eliot without McAlmon’s name on it, it is sometimes referred to as Pound’s scathing parody of Stein. For different accounts of this quote see Wagner-Martin, *Favored Strangers*, 185; and James R. Mellow, *Charmed Circle: Gertrude Stein and Company* (New York: Praeger, 1974), 290.

is quite right but why include Gide.²²

Like these figures of genius and “first rate importance,” the monolithic “stones” on the cover of Stein’s notebook—Caesar Onestone, Mr. Einesteine, OneStein—represent pillars of authority. Their names constitute a powerful triumvirate of figures in politics, science, and art, into which Stein inserts herself.

The notion of a Caesarian Stein was not lost on others; indeed many who knew Stein, not least of which the painters and sculptors who portrayed her, describe her as singular and autocratic, often explicitly roman or regal. Toklas, narrating her first meeting with Stein in *What is Remembered* describes Stein as “a golden brown presence, burned by the Tuscan sun” and as a “Roman Emperor.”²³ Toklas’ reflections in her book, published in 1963, are potentially inflected by the images of Stein in the artistic and popular imagination that proliferated after that first meeting. When her hair was longer, Stein wore it in a crown-like fashion on top of her head; in 1927, Alice would cut it into Stein’s signature Caesar-cut.²⁴ But it might equally be argued that Toklas’ styling of Stein manifested those first impressions of Stein, and reflected the way in which Stein not only “wore” Caesars (in her habit of

²² Stein, *The Autobiography of Alice B. Toklas*, 231.

²³ Alice B. Toklas, *What Is Remembered* (New York: Holt, Rinehard & Winston, 1963), 23.

²⁴ When recalling Picasso’s portrait of Stein in 1905-1906 in *The Autobiography*, the narrative voice jumps ahead in time to the present moment of the writing (approximately 1931-32), reflecting on the days just after Alice cut her hair:

Only a few years ago when Gertrude Stein had had her hair cut short, she had always up to that time worn it as a crown on top of her head as Picasso had painted it, when she had had her hair cut, a day or so later [. . .] he caught sight of her through two doorways and approaching her quickly called out, Gertrude, what is it, what is it. What is what, Pablo, she said. Let me see, he said. She let him see. And my portrait, said he sternly. Then his face softening he added, mais, quand même tout y est, all the same it is all there. (Stein, *The Autobiography of Alice B. Toklas*, 53)

wearing monkish but regal robes and also in frequent declarations of her singular authority), but was also styled Caesar by others (the two, of course, fueling each other symbiotically).

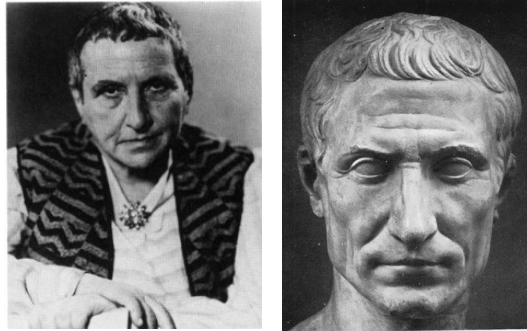


Fig. 3. Photograph of Gertrude Stein, 1934²⁵; photograph of a bust of Caesar.²⁶

Portraits of Stein often have her posed Buddha-like or in a neo-classical style, looking regal, or perhaps dictatorial. In 1927, artist Pavel Tchelitchew, once a member of Stein’s circle, whose anti-Semitism caused a rift between him and Stein, and who was later snubbed by the group, drew Stein in a toga, seated as if on a throne, imperially holding a globe in one hand. Francis Picabia would again take up this image in 1933, in a more flattering portrait than Tchelitchew’s, presenting the shorn Stein stately seated, arms crossed, mouth unsmiling, looking not quite at the artist, with mountains in the background—a clear reinvention of the Mona Lisa. But this Mona Lisa is also Caesar, as she is featured shorn and regal, wearing a toga (see figure 4). Her toga drapes the same shoulder as the Mona Lisa’s shawl, but her arms

²⁵ Photo in Renata Stendhal, “Was Gertrude Stein a Hitler Fan?” *Women’s Media Center* (8 December, 2011).
<<http://www.womensmediacenter.com/feature/entry/was-gertrude-stein-a-hitler-fan>>

²⁶ Flemming S. Johansen, “The Portraits in Marble of Gaius Julius Caesar: A Review,” in *Ancient Portraits in the J. Paul Getty Museum Vol I.* (Malibu, CA: J. Paul Getty Museum, 1987), 18.

are crossed oppositely, her mannish hands further emphasized. To Stein's circle, she was an authoritative Caesar figure—a holder of court and arbiter of taste. To the public, she was an enigmatic figure—a twentieth-century Mona Lisa that kept her audience guessing. The American audiences not yet familiar with Stein in 1933 would be introduced to her by *Time* magazine, which featured a photograph of Stein on its September 11 edition cover, looking even more like a bust of Caesar in a profile shot (see figure 5):

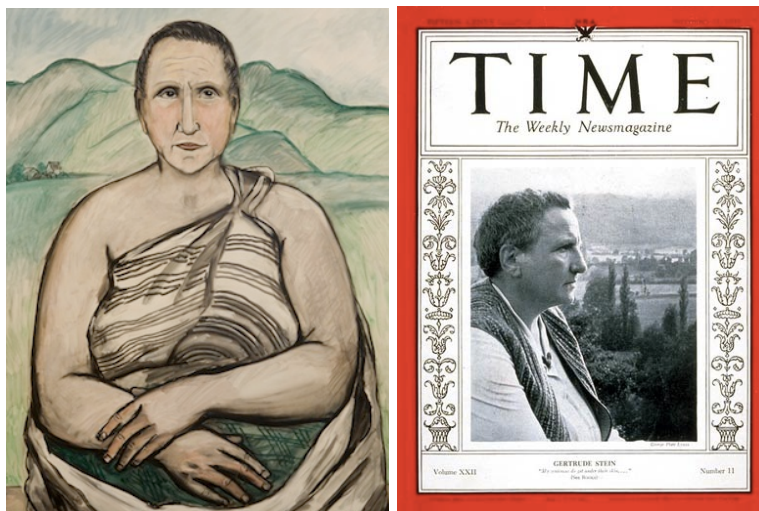


Fig. 4. [left] Francis Picabia, *Portrait of Gertrude Stein*, 1933.²⁷

Fig. 5. [right] Cover of *Time* (September 11, 1933)²⁸

Under this cover, James Agee's profile presents Stein to *Time*'s readership and reviews the recently published Harcourt Brace edition of *The Autobiography of Alice B. Toklas*. With a title punning on Proust—"Stein's Way"—Agee gives us Stein not as Caesar or the Mona Lisa in front of a mountainous landscape, though both

²⁷ Francis Picabia, *Portrait of Gertrude Stein*, 1933, oil on canvas, 97.5 x 140 cm., Gertrude Stein and Alice B. Toklas Papers, Yale Collection of American Literature, Beinecke Rare Book and Manuscript Library, Yale University, YCAL MSS 76, box 162, folder 4270.

²⁸ George Platt Lynes, "Gertrude Stein [Portrait]," *Time* 22.11 (11 September, 1933): cover. <<http://content.time.com/time/covers/0,16641,19330911,00.html>>

figures are appealed to in the cover's photograph; rather, in Agee's journalistic portrait, Stein *is* the mountain, *is* the landscape:

Like a huge squat mountain on a distant border of the literary kingdom, obscured not only by the cloudy procession of more Aprilly authors but by the self-induced fog that hangs around her close-cropped top, she has loomed from afar over the hinterland of letters, a sphinxlike, monolithic mass. [. . . .] Gertrude Stein, though she remains as mysterious as ever, has made herself a background place in the literary panorama.

Her ponderous slopes have been visited by no picnic-parties: the journey is too far a-field for weekday trippers; but some few fellow-writers have ventured into her shade [. . . .] supposedly sensible and certainly popular authors, have sat admiringly at her feet²⁹

Agee's extended metaphor of Stein as a mountain demonstrates both the image of Stein in the world of letters as "monolithic" and the common view of her as impenetrable. She is "sphinxlike" and "mysterious," but in reference to natural objects—weather, mountains, landscapes—rather than in a supernatural or spiritual sense. Pervasively in the popular American conception of Stein, behind accusations of her impenetrableness, are assumptions that, if only unlocked, Stein would make sense, and that her literary portraits and strange sentences would be saying something very real about the world. Stein's meaning becomes like the mysteries of the universe, penetrating her meaning like a scientific enterprise. Stein, looming over her confused public like the Sphinx of Giza, hints at another sculptural

²⁹ James Agee, "Stein's Way," *Time* 22.11 (11 September, 1933): 57.

trope: nature as the sculpture of a woman, waiting to be undressed, her mysteries to be revealed by science.

Though Stein as Caesar was not lost on American photographers, the 1930s saw her repeatedly compared with another seeming historical singularity—Albert Einstein—not least because of the seeming impenetrability of each. Agee follows suit. The *Time* article begins with a version of a limerick of unknown origin:

I don't like the family Stein.

There is Gert, there is Ed, there is Ein:

Gert's poems are bunk,

Ed's statues are punk, [sic]³⁰

And nobody understands Ein.³¹

The limerick relies on the coincidence of the ending syllable of these figures' surnames, but lands the joke through their family resemblance in the history of modern ideas—each of the “family” members, writer Stein, sculptor Jacob Epstein, and physicist Albert Einstein, represents the eccentricities of modernity in slightly different, but parallel, registers. The perceived difficulty of these figures' cultural productions—statues, poems, and knowledge—becomes genetic.

But the Gert of the limerick and the Gertrude Stein of the article that follows it are not precisely the same. Agee contrasts the “perfectly comprehensible, eminently readable” Stein of the *Autobiography* to the poet Stein, who, “to the man-in-the-street” is a “synonym for what Critic Max Eastman calls ‘the cult of

³⁰ It should be noted that “Ed” is an error—the “statue” producer in the limerick is Jacob Epstein. The letters section of the next week's edition of *Time* contains two humorous letters and an editor's response to the error.

³¹ *Ibid.*

unintelligibility.”³² Because Stein’s “lurid reputation as murderess of the King’s English” is built upon the unintelligible works, Agee reminds readers that “in Alice B. Toklas, Authoress Stein is on her best behavior” and that they would not recognize the language of this “lucid primer” in Stein’s “wilder work” like *Tender Buttons*, from which Agee selectively quotes as a demonstration.³³ While alluding to Stein’s earlier work as highly influential, Agee more or less leaves *Tender Buttons* in the category of “bunk” and “a public loss,” whereas after reading *The Autobiography*, *Time’s* readers “will find their faith in the limerick verdict sadly shaken.”³⁴

By the time of Agee’s article, Einstein had rooted himself in the hearts of the American public through his lecture tours in the early 1930s, becoming an American hero. But the “Ein” belonging to the “family Stein” of the limerick is also a particular version of Einstein, an Einstein whose theories were shocking and transgressive, one that emerges only when aligned through genetic similarity with the confounding Stein and radical Epstein, whose publicly commissioned statues were met with public outcry, and whose *Rock Drill* was regarded by the greater public as representative of the extremes of modern art. Though Einstein’s “annus mirabilis”—the year he published four articles that would add considerably to the foundation of modern physics, particularly in re-shaping notions of time, space, and matter—was 1905, the American public knew very little about Einstein until November of 1919, when Arthur Eddington announced the first experimental substantiation of the general theory of relativity to the Royal Astronomical Society. The next day,

³² Agee, “Stein’s Way,” 58.

³³ *Ibid.*

³⁴ *Ibid.*

newspapers around the globe began running the sensational story of the upending of Newtonian mechanics, of the massive change in what we believed about the universe. Mass and even *time* can change depending on the velocity of an object, and observers moving relative to one another can obtain different but at the same time *correct* measurements of an object. Three dimensions are transformed into four dimensions, gravity as demonstrated through the Newton's apple is replaced by the incomprehensible image of gravity being space-time *bending* around objects; simultaneity is a fiction; and mass is a measure of energy, making matter and energy not disparate entities but essentially the same substance. In 1921, Einstein won the Nobel Prize in Physics—for his theory of the photoelectric effect, however, and not for relativity. The photoelectric effect was similarly crucial in the development of modern physics, particularly quantum theory, and the Royal Swedish Academy was under pressure to recognize Einstein's contributions to physics, but relativity was still quite controversial at the time.³⁵ Thus 1921 also marks two Einsteins—the revered and the controversial. By 1933, Einstein maintained his reputation as a spooky genius, but had become relatively familiar, a positive figure of modern science with practical applications and verification, though the theoretical, paradigm-shifting Einstein remained an equally true descriptor, particularly for mentions of Einstein in popular culture.

In this way, the limerick's "family Stein" assembles particular, popular versions of the three figures as they represent experimental modernism in art, letters, and science, fashioned after their more avant-garde incarnations: Stein's

³⁵ Einstein gave his acceptance address on relativity anyway.

Tender Buttons (1914), Epstein's *The Rock Drill* (1913), and the Einstein of the 19-teens, recognized as a leading scientist but up to that point both a foreigner and representative of concepts highly foreign to everyday experience.³⁶

By the 1930s, however, Stein and Einstein had become hot commodities.³⁷ While Stein struggled to be published before the serialization of *The Autobiography of Alice B. Toklas* in the pages of the *Atlantic Monthly* from May through August of 1933, after Stein took hold in the public's imagination, articles "decoding" or explaining Stein's earlier works became fashionable. Similarly, after the solar eclipse providing "proof" of Einstein's theory in 1919, popular accounts of Einstein's theories filled the shelves of bookstores. In the American newspapers after the mid-1930s, when lecture-going audiences clamored to see Einstein and Stein on their respective American tours, the Stein-Einstein comparison became a journalistic cliché. In a 1935 article about the "lecture business" in America, Catherine

³⁶ The trope of the "family Stein" is not limited to the limerick used in Agee's *Time* article. Literary critic Marjorie Perloff, among others, has, in a more serious vein, used the conjunction of the -stein surname and role of genius/iconoclast as a site for comparison, bringing together Gertrude Stein's poetics and Ludwig Wittgenstein's philosophies of language. See Perloff's "'Grammar in Use': Wittgenstein / Gertrude Stein / Marinetti" *South Central Review* 13.2/3. (Summer-Autumn, 1996): 35-62 and *Wittgenstein's Ladder: Poetic Language and the Strangeness of the Ordinary* (Chicago: University of Chicago Press, 1996). Additionally, John Brockman, a literary agent specializing in scientific literature, offers the theory of the "Four Steins" where each "Stein" is a "cornerstone of post-modern consciousness," in his 1986 book *Einstein, Gertrude Stein, Wittgenstein, & Frankenstein: Re-Inventing the Universe* (New York: Viking, 1986, 6). Beyond the introduction, Brockman does not actually compare, at length, the figures of its provocative title.

³⁷ Dana Cairns Watson accounts for a much fuller picture of the "talk of the thirties" and Stein's American lecture tour, with detailed coverage of the many comparisons between Stein and Einstein in the popular media in her book-length study *Gertrude Stein and the Essence of What Happens* (Nashville: Vanderbilt University Press, 2005); see particularly pages 98-101.

Mackenzie numbers Einstein and Stein among the most famous names to bring in bodies, detailing how lectures by such imports and ex-pats satisfy the monarchy-less American audience's craving for an intellectual "royalty."³⁸ Mackenzie speculates that the desire to see figures like Einstein and Stein in the flesh stems from "the desire to touch even remotely and vicariously" the more "distant and longed-for experience" of understanding their ideas; describing the mobs that came out to see Einstein, she claims "even if we had got inside we wouldn't have understood the theory" just as, lacking an coherent understanding of her meaning, "we want to have a look at Gertrude Stein."³⁹

There are thousands of examples in the popular media of the ideas of Stein and of Einstein, individually, being referred to as "unintelligible" or "incomprehensible." It is no surprise, then, that when spoken of in conjunction this is a main point of their comparison. That Einstein and Stein are two comparable examples of untouchable great minds, onto some secret of the universe not accessible to the average, or even above-average citizen, inheres in even the most dismissive and tongue-in-cheek mentions of the two together.⁴⁰ For example, a headline from the *Chicago Herald* asks "Understand Einstein? Just Try Stein-Stein,"⁴¹

³⁸ Catherine Mackenzie, "The Lecture Business is Picking Up, Too: Prices are Down, but Bookings Rise; Foreigners are Few, but Our Celebrities Satisfy an Old Craving" *The New York Times* (20 January, 1935): 9.

³⁹ *Ibid.*

⁴⁰ For example, a rant against traffic circles near the Long Beach highway: "The road builders, for some reason known only to great minds like Einstein and Gertrude Stein, have built a gigantic circle to slow up traffic from all sides" (Ed Ainsworth, "Along El Camino Real With Ed Ainsworth," *Los Angeles Times* [11 May, 1935]: 5).

⁴¹ "Understand Einstein? Just Try Stein-Stein," *Chicago Herald* (8 November, 1934); clipping in Gertrude Stein and Alice B. Toklas Papers, Yale Collection of American

and a reviewer claims Stein is “harder to understand than the mathematical hieroglyphics of Einstein’s theory of relativity.”⁴² Announcing the republication of Stein’s *Three Lives*, one article takes the comparison more seriously, endorsing Stein’s work:

You remember that there were supposed to be twelve—only that number—humans in the world who understood the Einstein theory. However many there are who understand Gertrude Stein, M. Fay stands, next to Gertrude Stein herself, as chief understander, and his introduction thoroughly elucidates for the first time in any language, the full wonders of her work.⁴³

While this example suggests that the number of “understanders” of Stein could be potentially larger than those who understand Einstein, it nevertheless suggests that there are few who fully take account of the “wonders” of her work—that we are not just missing the substance but missing the value. Those wonders go unaccounted for, presumably, because of our inability to understand, not by any fault of the work or ideas. Along these lines, a *Los Angeles Times* column wonders if the only minds capable of understanding Stein and Einstein aren’t Einstein and Stein:

Things never come out right in this faulty world. Just as Prof. Einstein, the scientist, arrives with a large crate of fresh relativity, Gertrude Stein, the poetess, goes hence. For years I have been waiting to see these two massive minds brought under the same bulging roof, hoping they’d take on a job

Literature, Rare Book and Manuscript Library, Yale University, YCAL MSS 76, box 145, folder 3355.

⁴² Quoted in Watson, *Gertrude Stein and the Essence*, 99.

⁴³ “‘Three Lives,’ Work by Gertrude Stein, to Be Issued Again,” *Chicago Daily Tribune* (19 August, 1933): 8.

which lesser intellects could never cope with. I wanted her to explain his theory and him to explain her poetry.⁴⁴

Though this is fraternity of geniuses to which Stein and Einstein belong is principally a product of the American popular imagination, the comparisons suggest something beyond surface analogy. Einstein and Stein were representative of all that was confusing and unsettling, but also promising about the modern world—new understandings of the fabric of the universe, of time, space, the material, the human mind. The comparisons invest a value in the work of each figure that is analogous not only on scale but also on content. If American audiences truly believed Stein’s poetry to be only substanceless rambling, she wouldn’t be paired so often with an intellectual superstar that American audiences believed held the formula to unlocking the secrets of the universe. Many Americans and many critics did find Stein a rambling charlatan, but behind that opinion lurked suspicion—suspicion that something about her words was being missed. It might be that suspicion that leads to the pervasive analogizing of Stein to other prominent figures of discovery—the sense that what she *is* doing is uniquely important, but a confusion as to how exactly or to what end.

This suspicion is nowhere more evident than in psychologist and social critic B. F. Skinner’s article, “Has Gertrude Stein a Secret?” published in *The Atlantic Monthly* in January, 1934.⁴⁵ In it, Skinner proposes a theory that Stein’s early

⁴⁴ Irvin S. Cobb, “Observations,” *Los Angeles Times* (17 October, 1935): 1.

⁴⁵ Note that *The Autobiography of Alice B. Toklas* was serialized in *The Atlantic Monthly*. Because the *Autobiography* went “viral” by 1930s standards, *The Atlantic Monthly* was more than happy to publish Skinner’s take on Stein, who had captured

writings were continuations of her undergraduate experiments with “automatic writing.” Skinner reads Stein’s remark in *The Autobiography of Alice B. Toklas* that “the method of writing to be afterwards developed in *Three Lives* and *The Making of Americans* already shows itself” to mean that her experiments with automatic writing, with graduate student Leon Solomons, comprised the method for her early writings, including *Tender Buttons*.⁴⁶ The flaws of Skinner’s argument have been pointed out by many a critic and Stein-defender, both immediately and in the years since. The theory, while intriguing to readers who at the time were anxious to “decode” Stein’s more difficult work after discovering her through *The Autobiography*, is essentially dead. Skinner’s “investigative” criticism hinges on his own comparison of a scientific paper by Solomons—Stein is listed as the second author—to the style of *Tender Buttons*. Two published articles actually came out of Solomons’s and Stein’s research, the first article being “Normal Motor Automatism,” published in the *Psychological Review* in September of 1896.⁴⁷ This article was in fact written entirely by Solomons, with Stein credited as second author because of her help with and participation in the experiments; she was involved in neither the design of the experiment nor the writing. A second article, this time written by Stein—“Cultivated Motor Automatism”—is ignored by Skinner. Interestingly this piece on “cultivated” motor automatism is about experiments with *learned* rhythmic movement, *not* random movement. And the shapes produced by the pens of Stein’s

the American imagination. Skinner’s article was also widely read, and a flurry of letters, editorials, and even secondary coverage in other news media followed.

⁴⁶ B. F. Skinner, “Has Gertrude Stein A Secret?” *The Atlantic Monthly* (January, 1934): 50; Stein, *The Autobiography of Alice B. Toklas*, 73.

⁴⁷ Leon M. Solomons and Gertrude Stein, “Normal Motor Automatism,” *Psychological Review* 3.5 (September, 1896): 492-512.

subjects—“circles, the figure eight, a long curve, or an m-figure”—can hardly be called “writing.”⁴⁸ The “automatic writing” of Stein’s undergraduate lab work has only a tenuous and metaphorical relationship to the style that Skinner claims characterizes *Tender Buttons*, which might be better described as “free-associational” (nevertheless *still* a misreading of the style of *Tender Buttons*).⁴⁹

But while the “secret” of Stein’s past scientific investigations is meant to be the main revelation of Skinner’s article, he also proposes a secondary thesis: that there are actually two Steins. He claims that Stein’s more difficult work (*Tender Buttons* particularly) differed so much from the *Autobiography* because of a split in Stein’s selves: a lucid self that writes with her mind, and a secondary self, writing *Tender Buttons* “automatically” and more or less unconsciously, with her arm. This theory of the “Two Steins” was appealing to American readers who enjoyed the *Autobiography* but were baffled by *Tender Buttons*. Skinner dismisses *Tender Buttons* as unreadable, but in his own way saves Stein for American audiences—just not the Stein of *Tender Buttons*. This division of Stein into lucid, *Autobiography*-writing Stein and the incomprehensible,⁵⁰ experimenting,⁵¹ *Tender Buttons*-writing

⁴⁸ Gertrude Stein, “Cultivated Motor Automatism: A Study of Character in Relation to Attention,” *Psychological Review* 5.3 (May, 1898): 296.

⁴⁹ Beyond his misreading of the Solomons/Stein articles and *Tender Buttons*, Skinner’s piece is a stretch in terms of its basic proofs. His theory relies on the alleged “clue” revealed in *The Autobiography* about Stein’s scientific investigations displaying a style developed in later aesthetic work. In the passage, Stein refers to *Three Lives* and *The Making of Americans*, explicitly, and not *Tender Buttons*, as being related to her psychological work. Further, it is more likely she is referring to her research on normal consciousness, undertaken the year *after* she was working with Solomons.

⁵⁰ Though Skinner does not mention Einstein in his article, subsequent coverage of his essay makes the connection. Medical writer Jane Stafford re-hashes Skinner’s “findings” in her sensationally titled article, “Gertrude Stein Explained” (*The Science*

Stein was rampant in popular media accounts of Stein's work, most of which were confounded by "Steinese."⁵² But while Skinner introduces the "second Stein" in order to dismiss that side of her work from the realm of "important" literature, *Tender Buttons*, her "experimental" and "provocative" side, nevertheless remains on readers' minds in these accounts—the second-self that cannot be exorcised. Though American audiences were able to access Stein in the 1930s through her lectures and the *Autobiography*, making the strange woman reachable, their curiosity persistently turned back to her earlier, "more difficult" writings.

Though much more methodologically rigorous and illuminating than Skinner's "revelation," later studies of Stein's work have frequently alighted on another (alleged) "secret" in her text, that is the "encoded lesbianism" at the "secret heart" of Stein's literary experimentation.⁵³ Whether she was read as OneStein, Two

News-Letter 27.725 (2 March, 1935): 134-135). Stafford's glib "scientific explanation," via Skinner, that Stein's "writing is done with her wrist and not with her mind" parallels Stein's writing to the incomprehensibility of Einstein:

If you have seen her play, "Four Saints in Three Acts," or have read any of her other strange writings, you probably feel that she needs as much explaining as that other famous "stein"—Einstein—who also always draws a capacity crowd but whom hardly anyone in the audience understands. (135)

⁵¹ Lansing Warren repeats the division of Steins (emphasis mine):

Her speech is steady, natural [. . .] It is the Gertrude Stein of the Toklas biography who is talking. You cannot find the faintest trace of "Tender Buttons." *That is her experimental, her provocative side* ("Gertrude Stein Views Life and Politics," *The New York Times Magazine* [6 May, 1934]: 9.)

⁵² As an editorial on Skinner's secondary thesis, "Two Steins," put it:

Mr. B. F. Skinner has an acute and urbane article on Gertrude Stein or the two Gertrude Steins. One writes good or distinguished English. The other writes involuntary, more difficult, to Mr. Skinner not "important" and sometimes apparently meaningless English or Steinese. [. . .] He prefers the conscious to the unconscious style, "The Autobiography of Alice B. Toklas" to "Tender Buttons." ("Two Steins," *The New York Times* [1 January, 1934]: 22.)

⁵³ Shari Benstock, "Beyond the Reaches of Feminist Criticism: A Letter from Paris," in *Feminist Issues in Literary Scholarship*, ed. Shari Benstock (Bloomington, IN.:

Steins, Caesar, or Einstein, Stein the poet, Stein the autobiographer, or Stein the lesbian, the difficulty of Stein's poetry, particularly the less overtly-autobiographical texts like *Tender Buttons*, compelled her contemporary readers and critics to seek out primarily analogical or biographical "codes" for evaluating her work—whether to interpret its meaning or to communicate its value. But despite the blossoming of Stein's celebrity in the 1930s making the names "Caesar Onestone," "Mr. Einesteine," and "OneStein" on her notebook for *Sentences* in 1929 seem prophetic, Stein's lectures and essays following 1934 do not bear out any theory that her reputation as the Einstein of letters acted as a wish-fulfillment.

Stein / Quine: Poetic Entity

Stein's near-overnight fame after the serialized publication of *The Autobiography of Alice B. Toklas* in 1933, and the sudden boom in popular practice for "decoding" her work through her biography, led her to critically re-evaluate the concept of authorship in her lectures and essays of the 1930s and 40s, where she offered a theoretical defense of the separation between the historicized identity of the author and the transcendent entity of the work of art. She had already tried to deflect attention away from herself, in a perverse fashion, by writing from the perspective of Alice B. Toklas. And though Alice consistently identifies and recognizes Stein a "genius" within *The Autobiography's* pages, in her American

Indiana University Press, 1987), 20. There are too many other relevant studies on the intersections of Stein's sexuality and her writing to list here.

lecture tour, Stein would tell the readership of *The Autobiography* that genius “has nothing to do with creation.”⁵⁴

In defending the self-subsistence of her work, and particularly *because* she had become an established artistic singularity, Stein faced a “Caesar Problem.” Stein’s ruminations on the definitions of “identity” and “entity” in the essays and lectures following *The Autobiography* are remarkably parallel to Frege’s problem in defining the difference between “Caesar” and “2.” Frege raises the facetious comparison between a historical person, Caesar, and an entity that seemingly exists outside of time, the number 2. Stein sought to define the difference between her “identity”—a combination of her self-fashioning as a genius of world-historic import (a Caesar in her own time) and her celebrity (which frequently figured her as the Einstein of art)—and the “entity” of her work, which she argued must be a thing-in-itself and outside of temporality.

Quine’s slogan, “no entity without identity”⁵⁵ acts as a step in the algorithmic solution to the Caesar problem. If there is an adequate individuated definition of number, then we can grant it entity, and if we can grant it entity through this principle of identity, we can differentiate number from other entities, such as Julius Caesar. In “Speaking with Objects,” Quine outlines his theory of identity as hinging on re-identification over time. He uses the example of the individuation process in child language development; pre-individuation, the term “mama” may have been attached to a broad spectrum of items, moments, people, sensations, actions,

⁵⁴ Gertrude Stein, “What Are Master-Pieces and Why Are There So Few of Them?” [1935], reprinted in *The American Poetry Review* 27.4 (July/August 1998): 9.

⁵⁵ Willard Van Orman Quine, “Speaking of Objects,” *Proceedings and Addresses of the American Philosophical Association* 31 (1957-1958): 20.

requests for care, and so forth; it then “gets set up retroactively as the name of a broad and recurrent but withal individual object, and thus a singular term *par excellence*.”⁵⁶ To have an identity, for Quine, depends upon being singular, having a “spatiotemporal convexity” that holds together disparate moments of recognition.⁵⁷

Stein similarly defines identity this way, and frequently through a figure of her own maternal care—her little dog. “I am I because my little dog knows me,” she writes in *The Geographical History of America* and elsewhere.⁵⁸ Identity, for Stein, is by necessity relational, dependent on both the narrativizing ego and social relations—forged through a recognition by an other (little dog, other human, or perhaps otherwise) and a recognition of that recognition by the self. This relation is not only social but historical, happening over time and *in* time, inseparable from the “habits” and “customs” of any given historical subjectivity.⁵⁹ Stein’s theoretical understandings of identity and entity operate from the same basic distinctions as that of Quine: identity is how a thing is identified, and this constructs *what* a thing is. Entity is the actual thing in itself and *that* a thing is. But whereas Quine’s ontology will hinge on the necessary relationship between the two—“no entity without identity”—Stein’s ontology proposes an inverse injunction, something like “identity destroys entity.”

Stein maps her distinction between identity and entity onto another binary, “human nature” and “the human mind.” William H. Gass summarizes Stein’s

⁵⁶ *Ibid.*, 11.

⁵⁷ *Ibid.*

⁵⁸ Gertrude Stein, *The Geographical History of America, or, The Relation of Human Nature to the Human Mind* [1936] (Baltimore: Johns Hopkins University Press, 1973), 99.

⁵⁹ *Ibid.*, 72.

distinction between human nature and the human mind in his introduction to *The Geographical History of America*:

Human nature is incapable of objectivity. It is viciously anthropocentric, whereas the human mind leaves all personal interest behind. It sees things as entities, not as identities. It is concerned, in the Kantian sense, with things-in-themselves⁶⁰

Gass's use of Kant here is telling, as Kant is the philosophical father of delimiting knowledge to the phenomenal and conceptual, bracketing things-in-themselves from philosophical access. Stein would likely read Kant as limiting thought to human nature—which can “connect” things to thought but cannot make “contact” with things-in-themselves. Stein differentiates the way human nature and the human mind approach things in this way:

To understand a thing means to be in contact with that thing and the human mind can be in contact with anything.

Human nature can be connected with anything but it can not be in contact with anything.⁶¹

“Things,” or things-in-themselves, for Stein, are entities, the opposite of identities and beyond the direct grasp of human nature. Like Quine, Stein holds mathematical objects to be entities, as well as geographical forms, whether the actual land or the undirected abstract signs of a map. For Stein, however, mathematical forms, maps, and masterpieces are entities *not* because of having

⁶⁰ *Ibid.*, 38.

⁶¹ *Ibid.*, 66.

individuated identities, but because of their *resistance* to identity; they belong to the realm of the human mind, which is outside identification and time. As Gass writes,

Just as the order of the numbers in a sum makes no difference, just as there is no special sequence to towns on a map, the mind and the masterpiece may pass back and forth between thoughts as often and as easily as trains between Detroit, Duluth, and Denver⁶²

Crucially, masterpieces exist outside of a prescribed linearity (like the sequence of towns on the map) and the limits of temporality. As Stein writes,

One and one makes two but not in minutes. No never again in minutes. That is what is the human mind. There is nothing in it about minutes.⁶³

This view of the work—that is, the masterpiece—as a product of the human mind, the domain of abstract mathematics and geography, is explicitly in opposition to Pound’s geographical positioning in *The Cantos*. In recognition that he could not get outside of the system, Pound swapped the prospect of geometric universals for embodied, subjective experience, “periplum, not as land looks on a map / but as seabord seen by men sailing.”⁶⁴ Stein, in *The Geographical History of America* consistently defines the human mind, the locus of creation, from a geographical perspective above the landscape, in the abstract and (allegedly) timeless figure of the map.⁶⁵ The “excitement” Stein locates in geography is specifically seeing “how

⁶² *Ibid.*, 41.

⁶³ *Ibid.*, 67.

⁶⁴ Pound, *The Cantos*, 324.

⁶⁵ And though she does not use this terminology, the way she is describing the mapping of a rail journey in an undirected fashion lends itself more to a graph than the typical definition of a map.

does the land the American land look from above” rather than “from below and from custom and from habit,” that is, within the limits of the subjective and the zeitgeist.⁶⁶

In “What are Masterpieces and Why Are There So Few of Them?” Stein attempts to further define how masterpieces are entities, “ends in themselves,” with definable contours, separate from (and threatened by) the socially and historically constructed identities of writers, readers, and ages.⁶⁷ These ruminations on identity and entity, human nature and human mind, were in many ways Stein’s response to the effect of popularity and reception on her sense of her own creation. In *Four in America*, she reflects on Shakespeare’s change from “real” sounds in his plays to “smooth” sounds in the sonnets, which she suggests is the effect of human nature encroaching on the human mind, a writing *for* a sense of one’s self and for an audience: “Shakespeare’s plays were written as they were written. Shakespeare’s sonnets were written as they were going to be written.”⁶⁸ In writing *for* others, Stein found that creation consistently “breaks down.”⁶⁹ Many Stein scholars have commented on her own worry that she had “sold out,” that her voice was potentially corrupted by popularity and success. The immense popular interest in her as a “personality” threatened her sense of the impersonality of the work; personality is

⁶⁶ Stein, *The Geographical History of America*, 72.

⁶⁷ Stein, “What Are Master-Pieces,” 9.

⁶⁸ Gertrude Stein, *Four in America* (New Haven: Yale University Press, 1947), 120.

⁶⁹ In “What Are Masterpieces,” Stein takes up the letter and the lecture as concrete examples of writing “for” others. In a lecture: “one heard what the audience hears one say” and “letter writing has the same difficulty” because the writing is *to* someone, what “the other person is to hear and so entity does not exist there are two present instead of one and so once again creation breaks down” (9). She extends this beyond genre, however, to comment on the effects of too strong a sense of self on the part of the artist, and the way a strong awareness of the audience can change the work.

on the side of human nature, while the human mind is independent of personality and thus capable of creation.⁷⁰

Stein's fame opened a chasm between her "personality" which audiences clamored for and her *work*, which was still lampooned as unreadable (as I have demonstrated through the popular comparison of Stein and Einstein). This reputation for being better read *about* than read irked Stein considerably, as she reflected later in *Everybody's Autobiography*: "It always did bother me that the American public were more interested in me than in my work."⁷¹ While Stein was not exactly an artistic non-entity prior to gaining the celebrity identity that aligned her with Einstein in the 1930s, her fame in 1933 gave her more identity that she knew what to do with.

Creation, for Stein, depended on ignoring external recognition and suppressing internal recognition. At the moment of creation—of "doing something"—you are somehow, according to Stein, not consolidated by your own narrativizing ego or the recognition of others: "The thing one gradually comes to

⁷⁰ It's important to note that Stein's rejection of social forms of identity did not necessarily mean a suppression of the role of the artist or artistry in making the masterpiece, though there is a tension between creating "when identity is not" and the concept of intention; as Michael Szalay has argued, Stein idealized "the autonomy and perfection of literary creations" by way of understanding her writings as "shrines of the intentional" (*New Deal Modernism: American Literature and the Invention of the Welfare State* [Durham: Duke University Press, 2000], 126).

⁷¹ Gertrude Stein, *Everybody's Autobiography* [1937] (New York: Vintage, 1973), 50. Though it's concerns are somewhat far afield from mine, and its insights stretch beyond Stein's work, Juliana Spahr's *Everybody's Autonomy: Connective Reading and Collective Identity* (Tuscaloosa, AL: University of Alabama Press, 2001) provides more commentary on how the avant-garde work creates identity—or rather identities, as Spahr's study is also concerned with the practice of reading and with readers.

find out is that one has no identity that is when one is in the act of doing anything.”⁷²

That said, this suppression of identity is ongoing and difficult. As Stein writes:

It is not extremely difficult not to have identity but it is extremely difficult the knowing not having identity. One might say it is impossible but that it is not impossible is proved by the existence of master-pieces which are just that. They are knowing that there is no identity and producing while identity is not.

That is what a master-piece is.⁷³

Stein’s definition of entity, as the necessary negation of identity, flies in the face of Aristotle, whose Law of Identity follows that an existent, that is an entity that exists, must have a particular identity. To be a thing that exists is to exist *as* something, according to Aristotle, Frege, and Quine. Not so, according to Gertrude Stein.

Why is the entity of the work so hard to achieve, and so hard to maintain? For Stein this question is the same as the question “what are masterpieces and why are there so few of them,” the answer to which is: “Everything is against them.”⁷⁴ And that everything—history, identity, personality—has proved much more legible to Stein’s readers than the meaning of her work. As Robert Chodat rightly points out, “critics probably find refuge in biography more habitually when discussing Stein than with any other prominent twentieth-century writer.”⁷⁵ He argues this is because Stein’s work

⁷² Stein, “What Are Master-Pieces,” 9.

⁷³ *Ibid.*, 10.

⁷⁴ *Ibid.*

⁷⁵ Robert Chodat, “Sense, Science, and the Interpretations of Gertrude Stein,” *Modernism/modernity* 12.4 (November 2005): 602.

gives us so little obvious content and departs so drastically from our ordinary ways of making sense that, as long as we are unwilling to dismiss her altogether as idiotic (and dismissing her, we should always remember, is an option for which many intelligent readers have opted), we almost necessarily need to look for some supplementary resources.⁷⁶

Frege questioned whether formalist logic could really verify the truth or falsity of the statement Julius Caesar = 2 within its existing framework, and took up the task of establishing the ontology of number. The reader, and particularly the critic, of modernist texts in the mid-twentieth century (and beyond), grappled with similar questions about the ontology of a text, either as a separate identity or interpreted through the identity of the author. In the case of Stein, part of the impulse not to distinguish person from work is the work's apparent lack of its "obvious content" or "ordinary ways of making sense" as Chodat puts it, much like the lack of common-sensical "self-subsistence" of number that would enable Frege to argue for the number two's ontology as necessarily a different *thing* from Julius Caesar.

In the figure of Caesar, we can trace Stein's investigation of the meaning of historical singularity, establishing an artistic identity through her writing, her interactions with the artists in her milieu. But just as soon as she has established herself as a singularity, when the name "Gertrude Stein" has the self-subsistence granted to it by celebrity, a celebrity on the level of Einstein, she turns to meditations on the necessary separation between identity and entity, the necessary

⁷⁶ *Ibid.*, 603.

ontological separateness of the work of art in order to foster creation. For her reading public, however, the works of Gertrude Stein continued to perplex—there wasn't enough *there* there, so to speak, for her readers to make sense of the work without “supplementary resources,” most typically the identity of the author. In the literary criticism of the second half of the twentieth century, the supplementary resource reached for most often was Stein's sexuality and sexual identity. The supplementary resource most commonly explored in Stein's time was the analogy to geniuses, hinging on the shared property of unintelligibility.

The popular imagination invests genius with a central paradox: unintelligibility is the *sine qua non* of intelligence. Indeed, as Bob Perelman points out early in his study of Pound, Stein, Joyce, and Zukofsky, *The Trouble with Genius*, this “aura of illegible authority” that “surrounds the modernist genius” offers a “lure for endless study.”⁷⁷ But the very notion of genius runs counter to what, from the second half of the twentieth century into our own time, critics would regard as a solid heuristic for scholarship; as Perelman notes: “in a critical context, genius is an embarrassment.”⁷⁸

In his March 24, 1957, review of Elizabeth Sprigge's *Gertrude Stein: Her Life and Work* in the *New York Times* book section, Stephen Spender expresses fatigue with the constant critical analogies drawn between Stein and other historical “geniuses.” He calls this impulse to compare one art to another the “Demon of False Analogy” and details the logical flaws he sees in using this method to explain Stein's work:

⁷⁷ Perelman, *The Trouble with Genius*, 1.

⁷⁸ *Ibid.*

Most people, I suppose, would repudiate the suggestion that Johann Sebastian Bach was the Gertrude Stein of the eighteenth century. Strange then, how few are shocked at the proposition put about by critics [. . .] that Gertrude Stein was like “Bach working at fugal technique.” Not content with Bach, Elizabeth Sprigge more than once compares Gertrude Stein with Picasso: [. . .] “her first portraits are wonderfully built up balanced cubes of quiet-colored words, recalling such paintings as Picasso's portrait of Kahnweiler.”

So when it isn't fugues, it's cubes. And it doesn't stop there, for Gertrude Stein herself, at a loss to qualify her genius, puts into the mouth of Alice B. Toklas the perhaps more modest claim: “The three geniuses of whom I wish to speak are Gertrude Stein, Pablo Picasso and Alfred Whitehead.”

If one does not share the view that Gertrude Stein was the greatest genius of all time, one is confronted with the question: Is it possible that her whole conception of herself was based on a false analogy between her own work and music, painting, and science?⁷⁹

Clearly, not all critics were willing to accept an interpretation of the value of modernist writing through the *mythos* of genius. Spender questions the logic of these analogies, noting the flaw in an equation that does not work both ways. Just as Frege noted that “Jupiter’s Moons = 4” does not give us the same meaning as “4 = Jupiter’s Moons,” because four contains information about neither Jupiter nor moons, Spender points out that we would not say that Johan Sebastian Bach was the

⁷⁹ Stephen Spender, “Three Lives Make One,” *The New York Times* (24 March, 1957). <<http://www.nytimes.com/books/98/05/03/specials/stein-spender.html>>

Gertrude Stein of the eighteenth-century, but we will call Stein the Bach of the twentieth. In this way the critical evaluation of Stein and her work, through the *mythos* theory of genius, is a fallacy, prompted by the illogic of the “Demon of False Analogy.” At the moment Spender was writing his review, a few decades after the height of the fervor for analogizing Stein, a new critical practice had firmly taken hold in American criticism which would move literary evaluation away from the domination of biographical *mythos* and under the umbrella of a formalist *logos*: the New Criticism.

Should Ezra Pound Be Shot?: Poetic Autonomy

And here is where we turn away from Gertrude Stein and instead to Ezra Pound. The “case” of Pound in the 1940s is good limit case for literary evaluation that depends on the trope of the modernist genius, because even *if* we grant he is a genius, he certainly is an *embarrassing genius*. At best, Pound was an inconvenient figure in literary circles because he was on the losing side of a war—as e. e. cummings put it, Pound “bet a thousand percent on the completely wrong horse.”⁸⁰ At worst, Pound was a war criminal who knowingly sought both association and participation in a political program inseparable from the evil of the death camps.

On July 26, 1943, a grand jury in Washington, D.C., charged Pound in absentia with treason in a group indictment of eight pro-Axis propagandists (the other seven were operating out of Berlin). While news outlets expressed interest in the “Poet-

⁸⁰ Quoted in John Cohassey, *Hemingway and Pound: A Most Unlikely Friendship* (Jefferson, NC: McFarland & Company, Inc., 2014), 139.

Propagandist”⁸¹ it wasn’t until after Pound was back on U.S. soil that the interest in the popular press took off. On November 18, 1945, after nearly six months in the DTC, Pound was extradited to Washington, D.C. to stand trial, where he was indicted on nineteen counts of treason, and his counsel pursued an insanity defense. After his February 13, 1946, sanity hearing, it took only three minutes of deliberation for the jury to find Pound of “unsound mind.” He was committed to St. Elizabeth’s Hospital as a “forensic” patient, the designation for those who have been deemed criminally insane or incompetent to stand trial.

In March of 1948, the Library of Congress announced a new literary award: The Bollingen Prize in Poetry. Presided over by a selection jury of Fellows in American Letters of the Library of Congress and carrying the additional decoration of \$1,000, the prize was to be given each February for the best book of verse by an American author published in the previous year. Pound’s *Pisan Cantos*, published by New Directions in 1948, was awarded the Bollingen Prize in its first year; the Library of Congress announced the decision in February, 1949. The controversy that followed reached such a level that a resolution of a Congressional committee ordered the Library of Congress to discontinue not only administering the Bollingen Prize, but awards in general. The statements of the Bollingen judges were widely quoted in popular media, and the shuttering of the literary prize was covered as well; as one headline put it: “Ezra Pound Tempest Ends Congress Library Prizes.”⁸²

⁸¹ “Poet-Propagandist,” *Billings Gazette* (1 August, 1943): 6.

⁸² “Ezra Pound Tempest Ends Congress Library Prizes,” *Salt Lake Tribune* (20 August, 1949): 3. In subsequent years the Bollingen Prize was administered by the Yale University Library. For more on the history and particulars of the Bollingen Prize, see William McGuire, *Poetry’s Catbird Seat* (Washington, D.C.: Library of

Pound's trial, incarceration, and receipt of the Bollingen Prize made front-page news, garnering coverage in *Newsweek*, *Time*, and *The New York Times*, and generating headlines in the local press throughout the United States. The sensationalism and dark humor in the headlines of major newspapers and magazines demonstrate the American fascination with the peculiarity of an eccentric poet becoming tangled in affairs of state. Despite the seriousness of the charges, Pound's already established reputation as a self-aggrandizing "crank" cast him as a comic, rather than tragic, figure. Common motifs emerged in the first news cycle of 1945-46, such as mockery of the poet-as-prisoner ("He Started Out to be Bard and Ended up Barred") and derision of Pound's mental health defense ("Ezra was So Unbalanced He Wouldn't Even Hang Straight").⁸³ In 1949, Pound's official diagnosis of mental incompetence, coupled with popular consensus on his guilt of at least gross moral failing, if not treason, elicited similarly tongue-in-cheek coverage of his receipt of a government-administered prize—for example: "Pound Went from Bad to Verse and Won \$1,000."⁸⁴ The headline of the front page of *The New York Times* on February 20, 1949, brought together the concerns of both news cycles: "Pound, in Mental Clinic, Wins Prize for Poetry Penned in Treason Cell."

Literary scholar Hugh Kenner has offered us a Poundean lens through which to read modernism, establishing the cultural nexus of the "Pound Era."⁸⁵ To this we might add an understanding of modern criticism read through the extensive role of

Congress, 1988); also McGuire's *Bollingen: An Adventure in Collecting the Past*. Princeton, NJ: Princeton University Press, 1982.

⁸³ Headlines quoted in Noel Stock, *The Life of Ezra Pound* (London: Routledge Revivals, 2012), 426.

⁸⁴ *Ibid.*

⁸⁵ Hugh Kenner, *The Pound Era* (Berkeley: University of California Press, 1971).

the “Pound Question” in negotiating criticism’s understanding of author and text. James Kilpatrick presents the “Pound Question” to a general audience in an editorial obituary of Pound, “Ezra Pound, Great Poet, Bigoted Man” this way:

A great poet, but by established standards a bad man. He admired Fascists; he hated Jews. The question he leaves behind, the question I find so hard to answer – is whether the world of letters should officially honor a poet who is also a bad man.

Can the art be judged apart from the artist’s life? [. . .]

I have no answer.⁸⁶

Kilpatrick’s humble claim to have no answer isn’t entirely accurate; he later provides an answer to another sub-question—“Should we see poetry as poetry, acting as acting, singing as singing, or do we properly look beyond the work of art?”—with an affirmative: “I think Mr. Pound, the poet, should have been honored in his lifetime, his badness kept out of the balance. But it is a question on which reasonable men will disagree, and I do not press the point.”⁸⁷

Indeed many “reasonable men” did disagree, and did press the point—in literary journals, popular newspapers, and even official governmental legislation. The “Pound Question,” posed to his contemporary critics and admirers, friends, and even a jury in a District of Columbia courtroom, contained within it myriad sub-questions, with varying stakes. Initially, the question was that of Pound’s guilt or innocence specifically of the charges of treason, with secondary consideration to

⁸⁶ James Kilpatrick, “Ezra Pound, Great Poet, Bigoted Man,” *Toledo Blade*, 10 November, 1972, 19.

⁸⁷ *Ibid.*

how ideological concerns relate to evaluation of his work. Publicly and privately, literary circles debated whether Pound was actually a traitor, and whether he was less of a traitor because his political role was, by and large, ineffectual—and seen by many as frankly pathetic—or whether he was less culpable because he was potentially medically insane.

But larger questions emerged. Was Pound more than a traitor to the state; was he a traitor to the world of letters? Some defended Pound from a charge of treason by destabilizing the connection between artist and nation. Since the charge of “providing material comfort to the enemy” relied on Pound’s duty to his country of origin, e. e. cummings defended Pound by suggesting that “every artist’s illimitable country is himself.”⁸⁸ Others rejected the poet’s having an “out” via the cosmopolitan citizenship of the artist, such as the authors of the December 25, 1945, cover story of *New Masses*, “Should Ezra Pound be SHOT?” In his section, Arthur Miller railed against the “astonishing thesis that the laws punishing treason cannot apply to poets.”⁸⁹ Similarly, Albert Maltz disputed any notion that the poet deserved either independence of or special defense from matters of state, and emphasized that Pound’s role as poet made him, in fact, *more* culpable:

If Ezra Pound were a lawyer, doctor, businessman or factory worker, no voice would be raised in his defense. Yet it is *because* he is a poet that he

⁸⁸ Quoted in “Should Ezra Pound be SHOT?” *New Masses* 57 (25 December, 1945): 5. The article contains short “answers” to the question (all affirmative) by Lion Feuchtwanger (4), Albert Maltz (4), Eda Lou Walton (4-5), Arthur Miller (5-6), and Norman Rosten (6), followed by a final rejoinder by F. O. Matthiessen (6).

⁸⁹ “Should Ezra Pound be SHOT?” 5.

should be hanged, not once but twice—for treason, as a citizen, and for his poet's betrayal of all that is decent in human civilization.⁹⁰

There was little question about Pound's transmutation of anti-Semitism and economic pedantry into poetry; there were few who denied the existence of this material in *The Cantos* and there was a general consensus that the Radio Broadcasts were indefensibly full of objectionable material. But as regards *form* rather than *content* the question of how, exactly, ideological depravity might be relevant to the work remained. Because economic doctrine, fascist political ideas, and intolerance inhere in Pound's poetry (not just his "personal" life), his position complicates arguments for the accidental or irrelevant role of biography. So the question was not only whether personal "error" was relevant to artistic worth, but also whether beliefs damage not just the reputation of the poet, but of *all* of his poetry. And whether, in the case of poetry not overtly political in Pound's oeuvre, could *form*, itself, be political?

The Bollingen Prize controversy further introduced questions of the role of the government in determining the continuum between poet and poetry. Should the government intervene in "matters of taste"? Should the government permit, subsidize, or even reward art produced by those whose behavior runs counter to the prevailing values of the state? And if literary prizes stake out a territory for what a society should value, we are returned to the question of whether literature has a social responsibility, whether the highest marker of value should be an aesthetic or

⁹⁰ *Ibid.*, 4.

social one, and who should determine that value. What is the poet's responsibility to the public and to country? What is the social worth of the artist, of the work of art?

If the social responsibility of the poet, as judged by the general public, were a determining factor, Pound was unlikely to win any literary prizes. Nevertheless, the social values of democracy—particularly the value of free expression against censorship—were frequently invoked in defending the Bollingen decision. Here the question is not only whether a fascist deserves a revered place among poets in an abstract sense, but also whether he deserves the material function of government patronage, inclusion in anthologies, or treatment in university syllabi—and again, who shall vet the professor's syllabus? For some, the debate over whether to teach, read, or defend Pound hinged on democratic values; if we value democracy, does that not include the toleration of different viewpoints including those of an anti-Semite?⁹¹ Bennett Cerf, editor at Random House, initially excluded Pound from *An Anthology of Famous English and American Poetry*, kicking off furious debate in literary circles and the popular press, amid abundant accusations of censorship. A widely syndicated editorial pressed the point that omitting a fascist author was ironically fascistic, through an extended comparison to the censorial practices of Hitler:

⁹¹ For more on how the American values of democracy and individuality clashed with fear of elitism and "extreme" individuality in the American reaction to Ezra Pound in the 1940s, see Ted S. Blake, "America's Lord Haw-Haw: The Trial of Ezra Pound in the Popular Press" in *Ezra Pound and Poetic Influence: The Official Proceedings of the 17th International Ezra Pound Conference Held at Castle Brunnenburg, Tirolo Di Merano*, ed. Helen M. Dennis (Amsterdam: Rodopi, 2000), 224-234.

To drop Pound is to burn books in Hitler fashion. A man isn't a bad poet just because he favors fascism, or a good one just because he opposes it. History is full of great writers, painters, composers who were cowards, thieves, fornicators, turncoats, and rogues."⁹²

Reversing his decision, Cerf wrote in *The Saturday Review of Literature* on March 16, 1946, "we concede that it may be wrong to confuse Pound the poet and Pound the man. Pound the poet is deemed worthy of representation [. . .] Pound the man we find a contemptible betrayer of his country."⁹³

Cerf's remarks alight upon the most common solution to the "Pound Question": preserve the poetry by splitting "poet" from "man." Poet and pacifist Kenneth Patchen made a similar claim, writing in *The Conscientious Objector* in 1945:

I am writing in defense of poetry and in defense of that high view of humanity which is poetry's; I am defending the poet Pound against that other Pound who defiled and rejected the things of the spirit.⁹⁴

In contrast, others protested the partition of Pound into "poet" and "defiler." Harry Roskolenko refused to view Pound through this fragmentary lens, insisting on viewing Pound the poet *as* Pound the crank, an organic, and ugly, whole: "Pound, the crank, needs no sympathy; except that he is dead spiritually and mad organically."⁹⁵

⁹² W. R. Rogers, "About Books," *Mason City Globe Gazette* (29 December, 1945): 4.

⁹³ Quoted in *Ezra Pound: The Contemporary Reviews*, ed. Betsy Erkkila (Cambridge: Cambridge University Press, 2011), xlii.

⁹⁴ Kenneth Patchen, "Ezra Pound's Guilt," *The Conscientious Objector* (December, 1945): 4.

⁹⁵ Harry Roskolenko, "What Manner of Man is This?" *Voices: A Quarterly of Poetry* 141 (1950): 41-43; in Erkkila, *Ezra Pound: The Contemporary Reviews*, 313.

That is, being a poet and being a madman may be two aspects of Pound, but they are nonetheless fused in intimate relation; as Perelman writes: “The coin of Poundian genius has two sides, and as it circulates in the world the second side is especially visible; authority, speed, and range are inseparable from rage, incoherence, and paranoid obscurity.”⁹⁶

Pound was not particularly in favor of cordoning off his identity as poet from his political ambitions. He wanted to be a poet *and* an influential political thinker. Pound, much like Stein, presented himself as an important world-historic figure, both a sage scholar and political mover, throughout his career. And this attitude did not wane upon his indictment and incarceration. The failure of the European Axis, in Pound’s estimation, was not due to the superior ideological ground of the Allies, but to the powers of the Axis not paying substantial enough heed to Pound’s promotion of the axiom of Social Credit theory and his Confucian insight. Returning the country of his birth (under indictment for treason), Pound saw himself as continuing to play the role of sage counselor to world leaders, in his “world-historical role as the sane economist” or as a “Confucian super ambassador.”⁹⁷ Even while held awaiting charges in a Washington, D.C. jail cell, Pound “offered his services to the Allies, claiming that his knowledge of Asian culture would prove vital in the postwar

Roskolenko, reviewing the 1949 edition of *Selected Poems*, notes that the editors of the volume both selectively edited the writing for inclusion (editing *out* offensive material) and included no “editorial note that one expects” in the case of such a controversial author. “One can’t object loudly enough,” Roskolenko thunders, “to a method that proceeds to ignore what has recently taken place in the Bollingen Award fiasco” (313).

⁹⁶ Perelman, *The Trouble With Genius*, 29.

⁹⁷ Quoted in Cohassey, 134.

negotiations with the defeated Japanese; he also volunteered to learn Georgian so as to speak directly with Joseph Stalin in his native language.”⁹⁸

Though Pound indicated varying apologies and admissions of guilt to his friends in letters and visits at St. Elizabeth’s, and offered somewhat masked regrets in the final passages of *The Cantos*, there is little to indicate Pound threw off the mantle of ideological commentator in favor of living out his final days in the habit of a mere poet. Even on the day of his release from St. Elizabeth’s, as Kilpatrick reflects after his death, “We met in one of the Rococo drawing rooms of the Rotunda Club [in Richmond], and for more than an hour Mr. Pound harangued a few of us on the evils of government, the bankers, and Jews.”⁹⁹ Shortly after, landing back in Italy, Pound posed for photographs giving the fascist salute.

Whether to literary prize judges, his publishers, his friends, or scholars of modernist literature, Pound was—is—an inconvenient figure. The two Pounds theory, a separation of “poet” from “man,” came from both sides of the question of Pound’s traitorous acts, and from both sides of the political spectrum. But they are held in a tense relationship, each balanced on one side of a scale. Kilpatrick, in advocating Pound’s “badness” be “kept out of the balance,” asks whether aesthetic merits “outweigh” others. Many did claim Pound’s anti-Semitic remarks and controversial economic beliefs were “negligible,” in two senses. For one, critics who contrast a nominal quantity of objectionable statements to everything else in Pound’s oeuvre, implicitly offer an argument that Pound isn’t so bad by the numbers. Others take a less quantitative approach to argue that Pound’s racism and

⁹⁸ *Ibid.*, 135.

⁹⁹ Kilpatrick, 19.

political actions cannot do permanent injury to his poetry—regardless of the poetic content—arguing that, by nature, aesthetic achievements belong to a higher realm of value than the mundane faults of a (potentially mentally ill) mortal individual. This argument follows that the context in which Pound’s politics is disapproved is a function of historical time, but aesthetic value isn’t—which conforms with Stein’s theorizing the ontology of the text as outside the “customs” of historical time.¹⁰⁰

In an official statement anticipating the political controversy surrounding their award to Pound, the Bollingen Prize committee appealed to aesthetic autonomy, the “objective perception of value,” where aesthetic value overshadowed “other considerations”:

The fellows are aware that objections may be made to awarding a prize to a man situated as is Mr. Pound. In their view, however, the possibility of such objection did not alter the responsibility assumed by the Jury of Selection. This was to make a choice for the award among the eligible books, provided any one merited such recognition, according to the stated terms of the Bollingen Prize. To permit other considerations would destroy the significance of the award and would in principle deny the validity of that objective perception of value on which civilized society must rest.¹⁰¹

This invocation of “values” is different from the calls for the democracy of free expression: here aesthetic value is figured as at the core of civilized society, both the

¹⁰⁰ To which I would rejoin: if aesthetic forms may be said to exist outside of historical time, certainly forms of violent rhetoric may also be said to do so; they remain violent, independent of the “custom” of being offended by them.

¹⁰¹ Quoted in Gregory Barnhisel, *James Laughlin, New Directions, and the Remaking of Ezra Pound* (Amherst, MA: University of Massachusetts Press, 2005), 120.

highest and the more fundamental value, possibly pre-political. This sentiment was echoed in editorials throughout the American press, such as this from the *New York Herald Tribune*:

This emphasis on an objective criterion of beauty and excellence, akin to belief in an objective truth, is fundamental to a free and rational society. In maintaining it the [Bollingen] judges acted in the only way that is open to men who are sensitive to a later verdict of history.¹⁰²

This emphasis on the “objective truth” of aesthetics offered a way out of the ethical conundrums of the Pound Question, via an assessment of the poetic text as an object isolated from its creator. In an editorial for *The Capital Times* of Madison, Wisconsin reacting to the Bollingen controversy, August Derleth finds that “It does not matter that Pound was a traitor to the country” and “[it] does not count that he was anti-Semitic. The Fellows rightly disregard these particular issues and considered the poetry alone.”¹⁰³ Or, as another of the many sub-questions in Kilpatrick’s obit asks: “Should we see poetry as poetry, acting as acting, singing as singing, or do we properly look beyond the work of art?”¹⁰⁴ Kilpatrick’s rather demure use of “properly” softens any real ethical punch in asking if it is *required* of us to look beyond the text. And his ultimate defense of Pound settles the question as far as his own opinion is concerned. But behind his use of “properly” is a logical query about

¹⁰² Quoted in McGuire, *Bollingen*, 211.

¹⁰³ On that count, the author agrees with the judges. He however doesn’t agree with the awarding of the prize *for* the poetry: “I am afraid that, however much I disagree with the irrelevant points brought up by Hillyer, I should in all honesty have to admit the award to Pound was a mistake” as “much of it is simply not poetry” (August Derleth, “Minority Report: Of Ezra Pound, Awards Questioned, Works Judged,” *The Capital Times* [3 September, 1949]: 3).

¹⁰⁴ Kilpatrick, “Ezra Pound, Great Poet, Bigoted Man,” 19.

the ontology of the poetic text, a question not only of propriety, but also of *property*—does what is seemingly beyond or “outside” the text properly *belong* to poetry?

And it is this potential affirmation of the isolated ontology of the aesthetic text that drives the Bollingen committee’s very practical transfer of emphasis, in just a few lines, from the judgment of a “man” to the judgment of a “book.” A frequent answer to the Pound Question in the popular press and in literary circles was the assertion that Ezra Pound = 2 that is, for the name “Ezra Pound” there are two referents: Ezra Pound the Man and Ezra Pound the Poet. But a newly forming literary-critical consensus around aesthetic formalism proffered a strategy that could potentially take Pound, as man *or* poet, out of the equation. Among the writers of these feverish editorials, numbered among the judges for the Bollingen Prize, and beginning to fill the ranks of English departments at American universities, were members of an influential intellectual movement in the evaluation and teaching of literature, called the New Criticism. These critics, who called upon the principle of aesthetic autonomy, shifted the conversation from distancing the biographical components of the author—as “man” and “poet”—instead to a potent separation of “man” from “poetry.” Like Frege’s attempts to define the ontology of number such that we can begin to explain that Julius Caesar cannot be equal to the number two, literary criticism in the 1940s and onward began giving rigorous, logical—axiomatic—definition to the contours of the literary work, establishing a special ontology of the poem so that poet and poetry could be effectively unlinked.

The New Criticism: Poetic Self-Reference

While not described with complete accuracy under the heading of “New Criticism,” I will use “the New Critics” as a catch-all to refer to a grouping of figures committed to providing logical foundations for literary study and employing a (more or less) formalist method for literary criticism in the early to mid twentieth century. This group consisted mainly of American academics (Cleanth Brooks, John Crowe Ransom, Allen Tate, Robert Penn Warren, and William K. Wimsatt Jr., and to the extent that he spent much of his career in the American academy the Czech-American critic René Wellek) who became active in the late 1930s and flourished in the 1940s, and who were inspired by the earlier criticism of British figures I. A. Richards and William Empson, the Canadian Northrop Frye, the American and British duo Laura Riding and Robert Graves, and T. S. Eliot.¹⁰⁵ T.S. Eliot’s essays “Tradition and the Individual Talent,” and “Hamlet and His Problems,” were particularly inspirational to these critics, though they isolated only certain elements from these texts, such as the idea of the “objective correlative” and the “impersonal poet.” Along with these notions, New Critical works incorporated many other logical terms into criticism, such as “correlation,” “paradox,” and “fallacy.”

The prevalence of logical terms in New Criticism may be, in part, a reaction against logical positivism, which ruled the institutional roost in the pre-New Critical

¹⁰⁵ While not operating under a completely coherent theory, this group shares features of what was “new” about the new criticism, in its emphasis on the empiric, objective, formal qualities of poetry (though each of these values is defined by the critics in ways that differentiate them from scientific and philosophical discourses of the same). These critics advocated for reading and studying modernist poetry (Riding and Graves being the largest champions of modernism in the classroom) and much of their critical method was inspired by the prose essays of modernist writers.

moment. The rise of the modern research university required not only teachable knowledge to pass on to a growing student population, but trainable knowledge that would lead to the production of new knowledge. The emerging disciplines in the natural sciences were ready to provide here, presenting scientific knowledge as cumulative and progressive, producing both new discoveries and new and more refined theories and methods. This increasing valuation of the scientific threatened literature's place in the modern research university, leading Ransom to argue in *The World's Body* that "criticism must become more scientific, or precise and systematic, and this means that it must be developed by the collective and sustained effort of learned persons—which means that its proper seat is in the universities."¹⁰⁶ While *scientific* as an adjective and *science* as a noun are not and should not be treated as identical in New Critical discourse, the prevalent call in Ransom and others' work for a professionalization of literary studies, for a new literary research community (based on shared methods, publication, and peer conferences) and for a systematized and institutionalized *theory* of interpretation, is akin to the institutional model of the natural sciences as they saw it.

New Critical methods generally opposed the dominant forms of literary scholarship that aligned their methods with a nineteenth-century scientism: philology (as a kind of scientific study of language), genealogy and influence studies, and biographical and literary historical monographs, all of which constituted somewhat empirical studies regarding "history" as an objective category. The New Critics saw historical work within literary studies as pseudo-scientific: in this kind

¹⁰⁶ John Crowe Ransom, *The World's Body* [1938] (Baton Rouge, LA: Louisiana State University Press, 1968), 329.

of work they thought poems became products of biographic or bibliographic trivia, rather than objects open to formal interpretation and analysis. Ransom described these studies as “compiling the data of literature” rather than emphasizing “literary judgment.”¹⁰⁷ Ransom’s use of “judgment” is tricky, however. At the same time that the New Critics established themselves against the existing mode of the literary scholar, they also combated the man of letters who encouraged the impressionistic “appreciation” of literature and Romantic notion of the author as genius. Against a form of judgment based on taste or opinion, the New Critics sought a method of systematic interpretation that could wield claims on knowledge, not simply make claims on greatness or merit. In turn, imagining literature as a source of knowledge, beyond the simply pleasurable and emotive, contested a scientific monopoly on truth, for scientific rationalism constituted a dominant form of intellectual thought in the nineteenth and twentieth centuries.

The New Critics took issue with an evaluation of poetry as simply emotive or artificial, neither verifiable in the positivist sense, nor open to empirical evaluation. Instead, they argued that though the knowledge that literature offered did not contain the certitude of a mathematical equation, it could, and should, nevertheless be seen as offering objective knowledge, much like Pound and Stein’s poetics aimed to present objective descriptions of subjective experiences. In fact, in the opinion of Richards in particular, the knowledge that literature offered was a much-needed supplement to the cold rationality of nineteenth-century scientism; as Richards writes in *Poetries and Sciences*, “In its use of words poetry is the reverse of science [.

¹⁰⁷ *Ibid.*, 328.

. . .] Language logically and scientifically used cannot describe a landscape or a face.”¹⁰⁸ From this line of thinking it follows that poetry can actually grasp being, while “science, as our most elaborate way of *pointing* to things systematically [. . .] can tell us nothing about the nature of things in any *ultimate* sense.”¹⁰⁹ In fact, in an age of searching for grand, unified theories, it is rather the poet’s account of nature, according to Richards, that offers a “coherence that no other means could so easily secure.”¹¹⁰

The New Critics’ search for a method often appears almost messianic, waiting for the Critical Axiom to Come. Northrop Frye wished for a “coordinating principle, a central hypothesis” to be found for literary criticism “which, like the theory of evolution in biology” will help criticism “see the phenomena it deals with as parts of a whole.”¹¹¹ Frye’s fantasy of a comprehensive theory echoes Richards’s many calls for “a co-operative technique of enquiry that may become entitled to be named a science,”¹¹² both illustrating the New Critical interest in establishing a shared, rigorous and technical methodology for literary study. Again, this interest can be read as a two-part reaction to the formidable institutional power of the sciences: they hoped to resist the hard sciences’ domination of university and general culture

¹⁰⁸ I. A. Richards, *Poetries and Sciences* [reprint of 1935 work, originally titled *Science and Poetry*] (New York: W. W. Norton, 1972), 32.

¹⁰⁹ *Ibid.*, 54.

¹¹⁰ *Ibid.*, 52.

¹¹¹ Northrop Frye, *Anatomy of Criticism: Four Essays* [1957] (Princeton, NJ: Princeton University Press, 1973), 16.

¹¹² I. A. Richards, *Coleridge on Imagination* (Bloomington, IN: Indiana University Press, 1960), xii. Also, in *Speculative Instruments*, Richards admonishes critics “to seek a way by which Values might unrestrictedly come into the care of Science.” I. A. Richards, *Speculative Instruments* (Chicago: The University of Chicago Press, 1955), 145.

while at the same time they attempted to emulate the methodology they understood as logical and scientific, albeit a method which took the language of the poem as its data. In this way, their collective call for a “scientific” method was directly opposed to the *scientism* they saw dominating critical thought.¹¹³

Similarly, Ransom advocated an account of poetry centered on logic, defining a poem as “a *logical structure* having a *local texture*.”¹¹⁴ But while poems had a “logical core,” mathematical logic, according to Ransom, could not understand “the ontological nature of materials.”¹¹⁵ The “empiric” evidence found in poetry, as opposed to the empty formalisms of abstract mathematics, would “compel” the critic into an ontology, according to Ransom:

He will have to subscribe to an ontology. If he is a sound critic his ontology will be that of his poets; and what is that? I suggest the poetic world-view is Aristotelian and “realistic” rather than Platonic and “idealistic.” He cannot

¹¹³ The oft-repeated call for a more scientific method and the emulation of logical constructs for literary study leads to many puzzling contradictions in the New Critics’ discourse on literary criticism. While reacting against the reifying capitalist discourse of their time, which placed even the poem in a system of use and exchange, and their insistence on texts as an external and stable source of knowledge and as closed and totalizing systems alienated and reified the poem in an aesthetic sense. Attempting to replace the critical toolkit that came before them, which treated poems as specimens of a humanistic tradition which could be substituted, paraphrased, or abstracted, the New Critics turned texts into specimens for the dissecting table. Their emphasis on analysis itself calls up the scientific tone of the many terms and practices the New Critics either added to or reclaimed for literary study: one thinks of Empson’s fondness for the terms “machinery” and “method.”

¹¹⁴ Ransom, “Criticism as Pure Speculation” [1941], in *Criticism: Major Statements*. 4th edition. Eds. Charles Kaplan and William Davis Anderson (Boston: Bedford St. Martin’s, 2000), 457.

¹¹⁵ *Ibid.*, 461.

follow the poets and still conceive himself as inhabiting the rational or “tidy” universe that is supposed by the scientists.¹¹⁶

We must note the way that Ransom maintains a pretty naïve understanding of science in the above passage: assuming that practicing or theoretical scientists think of the universe as “tidy” is grounded in, at best, a pre-modern notion of science. At worst, Ransom evinces a complete misunderstanding of centuries of scientific practice. And he does not seem aware of the ways in which the abstract mathematics of the new physics were becoming the exclusive window onto the material facts of the universe, or the implications of that shift; rather he is responding to nineteenth-century models of logical positivism which seemed distant from the material. There was little incorporation or consideration of new scientific theories and models emergent in the early twentieth century in New Critical discourse. For example, Empson and others’ accounts of paradox reflected little knowledge of Russell, Frege, or Gödel’s accounts of the same concept in mathematics. Nonetheless, their own approaches reflected a similar struggle to reach the axiomatic.

Additionally, there are divisions within academic critics of mid-century that are potentially minimized in this summary. Ransom, for one, was critical of T. S. Eliot. Each critic had a differing opinion about what “objective” precisely entailed. The New Critical mode was also not the only game in town: F. O. Matthiessen argued for the social responsibilities of the critic, and Lionel Trilling was also interested in the moral and political issues within and around modern literature. In addition,

¹¹⁶ *Ibid.*, 464.

there was another “scientific” alternative to the discourse of the New Critics—Freudian criticism, of which Trilling was an advocate, if not a consistent practitioner. There is a not altogether accurate impulse to imagine the New Critics as completely dominating the critical field in the mid-twentieth century, and as wielding a monolithic methodology. As Jed Rasula puts it nicely:

it has become much too convenient to repeat the same old story about the oppressive New Critical hegemony, with Ransom as ward boss, pulling the strings of literary community grown so sterile that only the uncouth eruptions of Ginsberg and the Beats could topple the suffocating monumentality of it all¹¹⁷

Indeed the New Critics were not explicitly against social content in art; many among them advocated the social role of art. Rather, their argument for an aesthetic judgment of art allowed for setting aside one’s political agreement or disagreement with the political stance of the *artist*, and by extension the political stance of the work remained something that *could* be disregarded in their interpretive schema. The “Intentional Fallacy,” after all, was not entirely about taking history out of criticism but rather about taking the personal history of the poet out of interpretation—that is, not speculating on the intentions of the author.

Regardless of the New Critical position on the social role of art, the influential practice of close reading, extracted from the heterogeneous theories of the New Critical school as *the* prevailing critical technique, seemed often to ignore the social valences of art, and thus the autonomous, isolated text became its most portable

¹¹⁷ Jed Rasula, *American Poetry Wax Museum: Reality Effects 1940-1990* (Urbana, Ill.: National Council of Teachers of English, 1996), 95.

principle. Already in 1948, then president of the Modern Languages Association, Douglas Bush, denounced the New Critics and their emphasis on the text “*in vacuo*”¹¹⁸:

Poetry is not read, anymore than it is written, with the aesthetic intelligence only. The critics, some of whom are poets, have bemoaned the failure of belief, the loss of traditional values, the aggressive nihilism of the scientific positivists, but they themselves have been doing all they could to create a moral vacuum.¹¹⁹

As Terry Eagleton explains, close reading did “more than insist on due attentiveness to the text. It inescapably suggests an attention to *this* rather than to something else: to the ‘words on the page’ rather than the context which produced and surrounded them.”¹²⁰ Consequently, though much of modernist art was actually deeply imbued with social affect and even overt activism, the New Critics and others who invoked aesthetic autonomy in debates around the role of art in society in the 1940s (particularly in the Bollingen controversy), linked modernism and aesthetic formalism in cultural history; aesthetic formalism became the dominant critical methodology for reading modernist literature, and modernist literature was largely supposed to ignore contemporary cultural issues.

This influential practice in criticism and study of literature in the universities—reading the “work itself” in isolation and on aesthetic grounds—

¹¹⁸ Douglas Bush, “The New Criticism: Some Old-Fashioned Queries,” *PMLA* 64.1 (March 1949): 14.

¹¹⁹ *Ibid.*, 21.

¹²⁰ Terry Eagleton, *Literary Theory: An Introduction* [1983] (Malden, MA: Blackwell, 2008), 38.

provided an answer to, and blossomed through the reverberations of, the Pound Question. Gerald Graff writes of the clash between historical and aesthetic modes of criticism in the 1940s, connecting the Bollingen controversy and the New Critics much as I have attempted to do: “the Bollingen judges were able to dismiss the poem’s fascist and anti-Semitic doctrines as poetically irrelevant by applying the New Critical principle that poetry is impervious to assertion.”¹²¹ Even those who decidedly did *not* advocate for Pound’s receipt of the Bollingen award, nor hold any reverence for Pound in the world of letters, noted the intersection of New Critical principles and the Pound Question. As Robert Hillyer wrote in the *Saturday Review*, publisher of the main broadsides of the opposition to Pound during the Bollingen controversy: “the clouds of intellectual neo-Fascism and the new estheticism have perceptibly met.”¹²²

Though Pound’s publisher at New Directions, James Laughlin, would take issue with himself being labeled a “neo-Fascist,” for him, the meeting of New Critical aestheticism and Pound scholarship was a much sought after event. Scholar Gregory Barnhisel’s book-length study, *James Laughlin, New Directions, and the Remaking of Ezra Pound*, tracks the wooing of the New Critics by Laughlin, to get Pound “readmitted to the mainstream of literary history.”¹²³ *New Directions* was founded on advice from Pound, and was Pound’s major publisher. And Laughlin was much more than a mere supporter and publisher; he retained Pound’s lawyer, Julien Cornell, and it was Cornell who entered the plea of innocence for Pound at the

¹²¹ Gerald Graff, *Professing Literature: An Institutional History, Twentieth Anniversary Edition* (Chicago: University of Chicago Press, 2008), 229.

¹²² Robert Hillyer, “Poetry’s New Priesthood,” *Saturday Review* (18 June, 1949): 38.

¹²³ Barnhisel, *James Laughlin*, 109.

treason trial and suggested the insanity plea, leading to a competency hearing. In addition to this material support, Laughlin engaged on a campaign to promote Pound in literary circles, first relying on the influential poets of Pound's social circle, then expanding to the burgeoning field of formalist criticism. Barnhisel's thesis is that Laughlin not only took advantage of, but in fact advanced, the changes in literary study mid-century that shifted evaluation of literature based on moral or social edification to seemingly objective judgments of value based on closed systems of aesthetic worth.¹²⁴ In this way the "Pound Question" is placed very near the heart of the axiomatic turn toward the principle of aesthetic autonomy in literary study. As Barnhisel writes, "New Criticism's founding principle was the special ontology of the poem and the unique kind of knowledge and experience it contains."¹²⁵ Laughlin was able to leverage New Critical practice in order to save Pound for readers, in a campaign which attempted to marry the *mythos* of modernist genius and *logos* of formalist criticism. Bob Perelman's investigation of modernist "genius" and Barnhisel's study of Pound and Laughlin demonstrate how both the genius theory and the formalist theory have had a place in shaping the public understanding of modernism that continues to direct our critical discourse. Pound and Stein are central figures in this history.

Both strains of modern criticism, whether dependent on *mythos* or *logos*, conceptually overlap with the logical test of the Caesar Problem facing modern

¹²⁴ Though the New Critics, on the whole, found Pound overly didactic, and the *Cantos* overlong and too incomplete for the kinds of precise and exacting demonstrations of the inner tensions deftly constrained in the unity of poetic structure that characterized New Critical reading. They preferred T. S. Eliot.

¹²⁵ *Ibid.*, 107.

mathematics and logic. Using common sense, we do not need to know if two has ontological status in order to say that Caesar and two do not equate. But to execute a proof, asserting the falsity of the statement based on logical definitions of person and number, Frege identified the need to give a more precise definition for the separate ontology of number from person. Similarly, it has become intuitive to us, and certainly could have been to a reader in the 1940s, to assess a poem, without consideration of its author, as aesthetically valuable. But when pressed to defend that position, we must provide an explanation of the ontology of the art object separate from its producer. This was particularly difficult for readers of Gertrude Stein, and particularly pressing for proponents of Ezra Pound.

Apologists for Pound found themselves painted into an exclusively aesthetic corner, advocating for evaluation of Pound's poetry only on aesthetic terms, with aesthetic value overshadowing all those "other considerations." This strategy relied on defining the text as a "thing in itself," just as James Laughlin did in the following biting defense of Pound's poetry:

I am one who still thinks Ezra Pound's poetry is good—very good—
notwithstanding his political folly. These people who changed their minds
about the merits of Pound's poetry the day he was indicted for treason make
me sick and angry. A poem is a thing in itself. You judge it by itself, for itself,
and of itself—not by the politics of the man who wrote it.¹²⁶

This move to a critical strategy aligned with *logos* relies, at the very core, on the very logical paradox that threatened to undo logic at the beginning of the century—the

¹²⁶ Quoted in Barnhisel, *James Laughlin*, 103.

self-referential paradox, in which the Cretan claims all Cretans are liars, the barber can and can't cut his own hair, or in this case, the text is not only about something "outside" itself but about itself. The New Criticism is a legacy of axiomatic modernism, in its attempt to formalize literary criticism by relying on foundational interpretive axioms. That system is based on a special ontology for text, separate from author.¹²⁷ And this is the other iteration of the "self-referential" in axiomatic modernism—a reference which obliterates reference "outside" the text, whether to author or context, through establishing a hermeneutic circle, and a logical ontology of the poem as a *self-referential* object, "by itself, for itself, and of itself." The New Critics took this idea of the ontology poem as "by itself, for itself, and of itself" even farther, adding that, in addition to the conceit and content, the poem was *about* itself.

¹²⁷ While we tend to assign the separation of author and text to the New Critics, Barthes claims the "new criticism has often done no more than consolidate it" ("Death of the Author," in *Image Music Text*, trans Stephen Heath [New York: Hill and Wang, 1977], 143). The New Critics and Barthes agree that it is not the singular intention of the author which speaks through the text. In acknowledging it is "language which speaks," Barthes and criticism from the 1960s and onward did not close the door on the multiplication of reference and intentionality. As Foucault tells us, the "author function" itself becomes a figure of discursive practice, a text within the text ("What is an Author?" in *Aesthetics, Method, and Epistemology*, ed. James D. Faubion [New York: The New Press, 1998], 205-222). And Bakhtin reminds us language is "overpopulated with the intentions of others" (*The Dialogic Imagination: Four essays*, trans. Michael Holquist [Austin: University of Texas Press, 1981], 294). The birth of the reader does not actually constitute the death of the author; in every text there is a birth of readers, authors, of reader-authors and author-readers. In this way, Barthes's "Death of the Author," does not constitute the end, death, or destruction of the author, either, but a proliferation of author functions and irrepressible meanings spilling out from the text, like the exponentially growing grains. Barthes "scriptor" is "born simultaneously with the text," and reborn upon each reading, making it impossible for the author to exist, axiomatically, *prior* to the text, in the classical sense, and making it impossible to bracket the author "outside" of the text, in the New Critical sense.

The “self-subsistence” necessary for ontology in a Fregean sense was offered by the New Critics in the irreducibility of the poem as an aesthetic experience, rather than a “statement” about experience, a notion pressed by Cleanth Brooks in *The Well Wrought Urn* (1947):

The poem communicates so much and communicates it so richly and with such delicate qualifications that the thing communicated is mauled and distorted if we attempt to convey it by any vehicle less subtle than that of the poem itself¹²⁸

For Brooks, the poet *makes*, rather than *communicates*.¹²⁹ Brooks’ theory that poetry was an experience of paradox held together in poetic structure, in particular, buttressed the claim that poetry could not be paraphrased. And Brooks’ now well-known injunction against paraphrase relies on something very much like the self-referential, in the logical sense:

if we are to speak exactly, the poem itself is the *only* medium that communicates the particular “what” that is communicated. The conventional theories of communication offer no easy solution to our problem of meanings: we emerge with nothing more enlightening than this graceless bit of tautology: the poem says what the poem says¹³⁰

Nevertheless, opponents of the New Critics found much of their discourse reductive. Douglas Bush criticized his New Critical colleagues for over-extending the definition of a poem by regarding it as an autonomous object held together in a

¹²⁸ Cleanth Brooks, *The Well Wrought Urn: Studies in the Structure of Poetry* (New York: Harcourt, Brace & World, 1947), 72-3.

¹²⁹ *Ibid.*, 75.

¹³⁰ *Ibid.*, 74.

tense unity of negotiations of paradox, ambiguity, and irony, leading to “the virtual identification of poetry with paradox.”¹³¹ In a masterful cross-examination of the logic of new critical principles published in *Modern Philology* in 1948, R. S. Crane claims the New Critics shared “the same tendency toward a monistic reduction of critical concepts”—and cites as examples Tate’s “tension,” Ransom’s “texture,” Richards’s interest in treating the “behavior” of words scientifically, and most critically, Cleanth Brooks’s concept of paradox.¹³² Brooks based the special ontology of the poem on its relation to paradox, arguing in *The Well Wrought Urn* that “the language of poetry is the language of paradox” and using paradox as the defining principle of the poetic.¹³³ Crane takes up Cleanth Brooks as a representative figure of New Critical “monism” and extends the logic of Brooks central theses in *The Well Wrought Urn*, arguing against what he sees as Brooks’s reductive definition of poetry as merely the wrestling of paradoxical elements in a single structure. He pulls from Brooks two “major propositions”: first, that the poetic imagination “reveals itself in the balance and reconciliation of opposite and discordant qualities”—that is in irony or paradox—and second, “the proposition that the proper antithesis to poetry is science.”¹³⁴ Irony and paradox as “somehow peculiar to poetry” and the only criteria for judging something as poetry provide insufficient definition, according to Crane, and leave out other rich territory for interpretation, criticism, and evaluation.

¹³¹ Bush, “The New Criticism,” 18.

¹³² R. S. Crane, “Cleanth Brooks; Or, The Bankruptcy of Critical Monism,” *Modern Philology* 45.4 (May, 1948): 227.

¹³³ Brooks, *The Well Wrought Urn*, 3.

¹³⁴ Crane, “Cleanth Brooks,” 230.

Crane claims that Brooks puts himself in “a difficult logical position” by advocating a “division of all discourse into two kinds”—poetry and science.¹³⁵ When Crane considers “what problems Mr. Brooks’s system will not permit us to solve,” he finds that Brooks’s central theses fail a logical test, much like Frege did when he used the Caesar Problem to identify the failure to distinguish number and person in existing frameworks.¹³⁶ That is, if Brooks holds that irony and paradox are qualities “peculiar to poems” then “we might reasonably expect him to offer some evidence that this is indeed the case,” such as providing readings of non-poetic discourses and demonstrating that the principles of irony and paradox do not appear.¹³⁷ Because Brooks does not do this, Crane fills in the blanks for him, offering examples from scientific and philosophical discourse, ancient to modern, which *also* demonstrate those elements that Brooks has reserved for poetic language alone. Crane offers the example of “contemporary physics” where

a statement is moved from the macroscopic level of classical to the microscopic level of relativity mechanics. It is true that the rules for such shifts, in modern science, can be explicitly stated and are well known; but even this has its analogue in poetry in the persistence of conventions and formularized techniques for getting “paradoxical” effects.¹³⁸

Crane’s *pièce de résistance* goes beyond establishing a mere analogy, however. He demonstrates the “poetic” principles of irony and paradox in scientific discourse and

¹³⁵ *Ibid.*, 240, 239.

¹³⁶ *Ibid.*, 236.

¹³⁷ *Ibid.*, 240.

¹³⁸ *Ibid.*, 242-43.

the synthesis of discordant elements in re-making language out of convention, in a single, arresting example:

One example will suffice—the formula in which Einstein brought together in a single unified equation the hitherto “discordant” qualities of mass and energy:

$$E = m c^2$$

I offer this, judging it solely by Mr. Brooks’s criterion for poetic “structure,” as the greatest “ironical” poem written so far this century.¹³⁹

Crane’s claim that Einstein’s formula is the greatest poem of the twentieth century is a *reductio ad absurdum* argument, logically extending the new critical thesis of the centrality of paradox to poetic language in order to prove, by the seeming absurdity of a formula as a poem, paradox as an insufficient logical principle.

For my purposes, however, Crane has supplied a compelling example of how the legacies of axiomatic modernism, in literature as in scientific discourse, continued to play out mid-century. The New Critics continued the legacy of *poetic* axiomatic modernism, but failed to take account or reflect on the modernist turn in mathematics, which, as I have demonstrated, offered robust accounts of semantic, epistemological, and even physical paradoxes. They failed the logical test of the Caesar Problem by dividing scientific from poetic discourse but not offering sufficient logical explanation for the separate ontologies of each. Einstein’s formula is, while a paradox to classical mechanics, nevertheless a foundational axiom for a modernist understanding of physical complexity. Despite using this as an insincere

¹³⁹ *Ibid.*, 243.

rhetorical flourish in his essay, to poke fun at the New Critics, Crane has provided a fitting analog for what I am trying to argue: that the New Critics attempt to provide a logical system for criticism also results in an axiom that is a paradox: an axiom of interpretation that takes the poem as a paradoxical, self-referencing object.

Thus this paradoxical structure which threatened to undermine the very possibility of axiomatizing logic and mathematics in the early century reappears in the axiomatic attempts of literary criticism mid-century. But mid-century literary criticism began to find the *mythos* of the modernist writer-as-genius insufficiently rigorous for research-level literary evaluation, in addition to the ethical conundrum of the political “follies” of a few modernist writers. Materially, the modernist figure him or herself acts as the impetus to systematizing criticism and giving it logical foundations, precisely because his or her inconvenience and mythic subjectivity unbalances the scales of cultural value and threatens the objectivity of literary evaluation and study. This leads to the legacy of axiomatic modernism in new critical literary theory, which continues the project of formalizing the system of poetics, not for generating poetry but for interpreting it. This attempt at systematizing criticism searched for foundational interpretive principles and axioms, such as aesthetic autonomy, the poem’s logical structure, and the centrality of paradox. A few decades after Russell’s *Principia Mathematica* and Frege’s *Foundations of Arithmetic*, a group of literary critics found their way out of their own Caesar problem by embracing a logical defect that was nevertheless an unavoidable truth— the self-subsistence necessary for the ontology of the poetic text hinged precisely on the paradox of self-referentiality. “There is a sense in which paradox is

the language appropriate and inevitable to poetry,” Brooks writes, “It is the scientist whose truth requires a language purged of every trace of paradox; apparently the truth which the poet utters can be approached only in terms of paradox.”¹⁴⁰

This legacy of axiomatic modernism stretches all the way to our current critical moment. Whatever critical methodology we favor, some version of the text as a self-referential object tends to cohere in our method. Whether we read with the New Critics and treat the “work itself” as a seemingly closed system, or with a deconstructionist lens and regard the “work itself” as being about its own unreadability,¹⁴¹ we take the self-reference of the poetic text as a critical paradigm. Which is to say, any good literary critic knows that a sign in natural language will never have a coherently fixable reference relation; language is always, in addition to whatever else it is about, about itself.

¹⁴⁰ Brooks, *The Well Wrought Urn*, 3.

¹⁴¹ The unavoidably self-referential nature of language is one of the cardinal concepts of deconstruction. Paul de Man, in *Allegories of Reading: Figural Language in Rousseau, Nietzsche, Rilke, and Proust* (New Haven: Yale University Press, 1979), for one, holds that texts inherently become “folded back on themselves and become self-referential” (205). In this line of thinking, texts are always about themselves, but as such they are allegories of their own incompleteness and incoherence, unreadability. Even in a system that does not depend on “real world” phenomena, where the system of meaning can be constructed “completely”—that is each letter given a determinate place by the poet—completeness is still not possible. Because meaning can be accidental and contingent, meaning is unstable; this is the “paradigm of all texts,” as all texts are “allegories of the impossibility of readings” (205).

Part III: Legacies of Axiomatic Modernism

CONCLUSION

Endgame

CLOV (*fixed gaze, tonelessly*):

Finished, it's finished, nearly finished, it must be nearly finished.

(*Pause.*)

Grain upon grain, one by one, and one day, suddenly, there's a heap, a little heap, the impossible heap.

(*Pause.*)

I can't be punished any more.

(*Pause.*)

I'll go now to my kitchen, ten feet by ten feet by ten feet, and wait for him to whistle me.

(*Pause.*)

Nice dimensions, nice proportions, I'll lean on the table, and look at the wall, and wait for him to whistle me.

Samuel Beckett, *Endgame*¹

In 1912, German logician and mathematician Ernst Zermelo gave a short talk to the fifth International Congress of Mathematicians, published in 1913 as “On an Application of Set Theory to the Theory of the Game of Chess.”² In this talk, Zermelo contributed the first known case of an algorithmically decidable problem, though the problem could yet be solved due to the limitations of the available means of calculation: a mathematically formalizable winning strategy for chess. Because who is “winning” in chess shifts back and forth, and thus the state or situations of the game evolve over time and in a non-linear fashion, Zermelo’s game graph for chess necessitated concepts beyond traditional mathematics; his analysis needed directed *and* undirected graphs, and concepts from set theory such as ordered pairs and the

¹ Samuel Beckett, *Endgame: A Play in One Act, Followed by Act Without Words, A Mime for One Player* (New York: Grove Press, 1985), 1-2.

² Ernst Zermelo, “On an Application of Set Theory to the Theory of the Game of Chess” (1913) in *Collected Works Volume I* (New York: Springer, 2010).

various ways to describe their relationships, such as tuples and arities (terms which sound as if they'd be more at home in a Lewis Carroll poem than in the domain of mathematics). The talk on chess would make little impact on set theory and modernist mathematics in its moment; the printed version resurfaced, however, in the 1930s when graph theory became a more prominent field of study. Indeed, what Zermelo drew out of "recreational mathematics" in this short thought-piece we now recognize as the seed of game theory, which has become a rigorous field with applications throughout the sciences and social sciences.³ The closing of Zermelo's comments on set theory and chess in 1912 left the main questions of the piece open, not just because of our limits in computation, but because, he suggests, the game and play of chess itself should perhaps resist our attempts to calculate it:

The special theory of the game would have to determine these numbers to the extent to which this is possible, or at least determine the limits within which they must lie. So far this has been done only in special cases such as the "problems" and the "endgame" proper. The question as to whether the initial position **P0** already is a "winning" position for one of the players is still open. Its precise answer would of course deprive chess of its character as a game.⁴

³ For a more detailed analysis of Zermelo's piece and its role in early game theory, see Ulrich Schwalbe and Paul Walker, "Zermelo and the Early History of Game Theory," *Games and Economic Behavior* 34.1 (January, 2001): 123-137. For a fascinating account of game theory in (later) literature, and the almost axiomatic emphasis put on the theory in US Cold War policy, see Tara Fickle's account of game theory and internment-era novels, "No-No Boy's Dilemma: Game Theory and Japanese Internment Literature" (*MFS Modern Fiction Studies* 60.4 [Winter, 2014]: 740-766).

⁴ Zermelo, 273.

Calculating the possible moves in chess, or predicting the opening moves which would determine the winner, or any of the other attempts to “solve” chess that Zermelo refers to, had only been calculated at his moment from endgame scenarios where the moves were already limited. To “solve” chess in its totality and seeming infinity, Zermelo suggests, would “deprive chess of its character.”

“Finer not to know,” as Emily Dickinson might say.

Do we deprive art of its character in highlighting its axiomatic aims? If we concede to Cleanth Brooks’s notion that poetic language is essentially and necessarily paradoxical, its structure paradox itself, poetry is not only inhospitable to the axiomatic, it is immune to further paradox. The threats to consistency in logic and mathematics that I have detailed in this project would pose no trouble to poetry—does it contradict itself? Very well, it contradicts itself! It is poetry. It contains multitudes, etc. But in the context of the axiomatic modernism I’ve presented in this project, we cannot define the poetic as *merely* and complacently dwelling in paradox. I have demonstrated the connections between mathematical logic and highly experimental poetry not only to combat an attitude toward the poetic as wielding a monopoly on complexity, but also to maintain that modernist poetry makes substantive claims on positive knowledge.

Similarly, I’ve suggested that literary criticism has come to recognize the self-referential paradox as the axiom of literary expression. From this axiom, suggested by the New Critics and developed through the lens of deconstruction, it follows that aesthetic communication is necessarily self-conscious—drawing attention to its own nature via an attention to sound, pattern, multiplicity of meaning, syntax,

form—and necessarily self-reflexive—folding in on itself to remind us of the gaps between sign and referent. But Stein’s and Pound’s attempts to “solve” the game of language through a project of linguistic control—a project modeled on formalist mathematics—do not represent the “endgame” of modernism, wherein an acceptance of the inherent limits of logic and the self-conscious nature of poetic language figure merely a latent postmodernism. It is my contention that in conflating modernism’s “failure” to axiomatize formal systems with a postmodernist divestment in truth claims we “deprive it of its character.” When we confuse literary modernism with philosophical postmodernism we choose reflexivity over positivity, process over substance, recursion over progress, and discursivity over referentiality. Axiomatic modernism allows us to see beyond these binaries.

The previous chapters detailed a widespread anticipation, at the advent of the twentieth century, for a theory of everything. This hope was quickly confronted with seemingly insurmountable paradox and incompleteness. The various projects to establish the absolute foundations of mathematics and logic at the beginning of the twentieth century participated in that great promise of the nineteenth, when, according to Gertrude Stein, “evolution first began to be known, and everything was being understood, really understood [. . .] everything was really being and going to be understood.”⁵ Throughout this critique of evolution as the foundational axiom not just for biology but for history and civilization itself, Stein employs the past participle—even when first *beginning*, and in the middle of *being*, and in the future

⁵ Stein, *Wars I Have Seen*, 62.

of *going to be*, this knowledge of everything would be complete, finished, *known* and *understood*. That completeness of knowledge, for Stein, Russell, and Whitehead, and for others like Hilbert and Wittgenstein, receded just as it seemed to be finally approaching, like the opening line of Samuel Beckett's *Endgame*, when Clov's past participles betray him: "Finished, it's finished, nearly finished, it must be nearly finished."

Scientific and philosophical projects that seek out the absolutely determinate systematize experience so as to generate a move toward generality—from particular to universal—and to closure—from complex to axiom. Fields that trade in notions of progress and completion, in fundamentals and axioms, routinely aspire not simply to more knowledge, but to the *end* of knowledge: a culmination in a complete system, a conclusion to the search, the closure of the circle, the end of unanswered questions. Some early twentieth-century finish lines were Hilbert's program, Russell and Whitehead's logical foundations for mathematics, Einstein's unified field theory, and the philosophical terminus of Wittgenstein's *Tractatus Logico-Philosophicus*. Wittgenstein, like Hegel and scores of philosophers before him, made it his project to *end* philosophy, as he writes in the final lines of his introduction to the *Tractatus*: "the *truth* of the thoughts communicated here seems to me unassailable and definitive. I am, therefore, of the opinion that the problems have in essentials been finally solved."⁶

Unlike Russell's *Principia*, however, which was to end logical paradox by providing a perfect totality, Wittgenstein's "end" to philosophy is actually a shift—

⁶ Wittgenstein, *Tractatus*, 29. Italics in original.

from questioning the existence of abstract concepts to clarifying the way we use language to make statements about the world. Wittgenstein quickly dispenses with attempting to represent totalities in language by providing foundational axioms in the form of *a priori* elementary propositions: “*The limits of my language mean the limits of my world.*”⁷ Wittgenstein privileges logic just as Russell does, but he claims that logic cannot get outside the limits of language, and by extension the limits of the world, to make existence claims about it: “Logic fills the world: the limits of the world are also its limits. We cannot therefore say in logic: This and this there is in the world, that there is not [. . .] otherwise logic must get outside the limits of the world.”⁸ For Wittgenstein, logic is about truth and falsity, and we cannot tell simply from a proposition alone whether it is true or false; we must see if it is isomorphic with the state of affairs. The essential or *a priori*, if always true, cannot have its opposite (falseness) described, and thus has no place in logical language. There are no propositions, then, that can truly be said to be *a priori*. We cannot get outside of language in order to provide it with foundational truths nor can we do so for logic, or any discipline that claims to describe or express the thinkable world, as the thinkable world is bound by language. For Wittgenstein, meaning is then a matter of *sense* rather than *truth*. In other words, if we cease to ask questions about the whole world, to attempt to speak about the totality of things, and instead speak about bounded portions of it, and most importantly recognize that we cannot get outside language in order to do so, our metaphysical problems are resolved. Philosophy *ends* because its metaphysical queries cease to exist.

⁷ *Ibid.*, 149 (5.6). Italics in original.

⁸ *Ibid.*, 149 (5.61).

Stein's project in *The Making of Americans* to completely describe human being came to a different kind of ending—she simply stopped trying. She discovered that “description is really unending,” and there was only one rational response: “one can stop continuing to describe this everything.”⁹ This reflection from 1945 in *Wars I Have Seen* perfectly echoes one in Wittgenstein's later work, *Philosophical Investigations*, the manuscript of which was being prepared in that same year (Wittgenstein withdrew the manuscript in 1945 and it was only posthumously published in 1953):

The real discovery is the one that makes me capable of stopping doing philosophy when I want to.—The one that gives philosophy peace, so that it is no longer tormented by questions which bring itself in question.¹⁰

While each *can* opt to stop chasing after an “everything” in aesthetic, psychological, or philosophical description, neither Stein nor Wittgenstein really “stop.”

Wittgenstein's philosophical about-face from the *Tractatus* to the *Philosophical Investigations* mirrors Stein's move from *The Making of Americans* to *Tender Buttons*. Wittgenstein aims to simplify things by working on a smaller-scale totality in the *Tractatus*, clarifying (by eliminating) philosophical inquiry by limiting the bounds of philosophy to the bounds of language. But the later *Philosophical Investigations* exploded that neat totality in recognizing the strange, vague, and unbounded possibilities of language in use. You would think that approaching language through the more humble structure of the “game” rather than as a

⁹ Stein, *Wars I Have Seen*, 62.

¹⁰ Ludwig Wittgenstein, *Philosophical Investigations*, trans. G. E. M. Anscombe (Oxford: Basil Blackwell, Ltd., 1958), 51.

complete axiomatic system would simplify matters, but one need only think of chess to remember the near infinite possibilities of play. Similarly, Stein swapped messy humanity in the *Making of Americans* for concrete things in *Tender Buttons*, approaching being through the analysis of objects rather than subjects. Yet even in the dead flesh of cuisine and the distinct dimensions of hatboxes, being was always becoming, and the objects, rather than organizing themselves cleanly in a scientific table, resisted description, flowing in and out of categories, resisting logical consistency as the “difference is spreading.”¹¹ Chapters One and Two argue, however, that Stein’s unclosed circles of identity still offer functional, if recursive, definitions. By rendering the orienting terms of classical logic—inside, outside, beginning, and ending—paradoxical in the impossible objects of *Tender Buttons*, Stein gives poetic contours to the vague. She reminds us that the vague is at the heart of our logics of the object world by re-writing the Sorites paradox (a single grain does not make a heap, if no grains of sand do not make a heap, then $n+1$ grains of sand do not make a heap, and thus no number of grains of sand can be said to constitute a heap) several times, as her own axiomatic statements dissolve into “sand” and her objects pile upon one another in a “heavy heap.”¹²

Or, in Clov’s words from *Endgame*: “the impossible heap.” Clov demurs from the impossible puzzle of making a logical sequence out of gradual and continuous change, describing the spontaneous clarity in the language of $n+1$: “Grain upon grain, one by one, and one day, suddenly, there's a heap, a little heap, the impossible

¹¹ Stein, *Tender Buttons*, 461.

¹² Stein, *Tender Buttons*, 498.

heap. [. . .] I can't be punished anymore."¹³ He retreats to his Euclidean kitchen, a cubic room with "nice dimensions, nice proportions," where he'll "lean on the table, and look at the wall," and wait for Hamm to whistle to him.¹⁴ There are edges to the table and delimiting clues as to the limits of a wall, but the beginning and end to the "impossible," unquantifiable heap of grain are not discoverable. The kitchen is seemingly a more complex object than the heap of grain, its higher-order geometry of "ten feet by ten feet by ten feet" contrasted to the arithmetic sequence of grains counted "one by one," and yet its legible square wall, and solid table make it a respite from the grainy, vague, logic of the heap, and by extension, the scene to which he awaits his summons: Hamm's slow crawl towards death, his finish, the "endgame."¹⁵ In Beckett's hands, the rational logic of a game of chess turns into the irrational experience of the absurd. Systems of thought—mathematical, religious, philosophical—may try to snap our existence to a grid, to give bounds to the world or to set out clear goals for existence. But although in *Through the Looking Glass* Alice moves linearly from one end of the chess board to the other, promoted from pawn to queen, Beckett's characters can't seem to literalize the chess metaphor of their setting. For one, Clov cannot retreat to Euclidean certainty—there is no "going back" in a chess game, just as there is no going back to the apodictic certainty of Euclid's axioms in the modern world. Twice in the play Hamm demands Clov position him in the center, to re-center him like a pre-modern subject, but this is met with difficulty and anxiety—there is no center to the chessboard. There is no one

¹³ Beckett, *Endgame*, 1.

¹⁴ *Ibid.*, 2.

¹⁵ *Ibid.*

central square in the eight-by-eight grid, no central place that man can occupy. In many of Beckett's plays, *Endgame* included, the characters hardly move. In the depressing chess-game of life, where the endgame for *both* sides is death and oblivion, any move inevitably weakens your position.

Ezra Pound found this to be true. As we saw in Chapters Three and Four, despite the metaphoric aptitude of that great war-game, chess, to the "breaking and reforming" of patterns in language and literary expression, the metaphor fails in context of real war.¹⁶ In such conflicts as twentieth-century world wars, one does not—cannot—make a tidy journey across the board. Like Alice, Pound became an involuntary participant in the game, his landscape shaped by the chessboard; but he found that the squares were "too even," and the board "too lucid" to match experience to such a representation.¹⁷ Another "ending" was denied, just as H. G. Wells's styling of WWI as "the war that will end war" settled into irony before the war was even over.¹⁸ Similarly, despite Hilbert's claim that no one could drive us from Cantor's paradise, philosophers and mathematicians after him have found that we cannot dwell too long in Cantor's paradise without tripping on the roots of some freshly budding paradox. Pound similarly could not enter his *paradiso*, nor find an unambiguous conclusion for *The Cantos*.

¹⁶ Ezra Pound, "Dogmatic Statement," 257.

¹⁷ Ezra Pound, *The Cantos*, Canto LXXVIII, 497.

¹⁸ See Wells's articles collected in *The War That Will End War* (London: Frank & Cecil Palmer, 1914).

The lack of a satisfactory “ending” to *The Cantos* has preoccupied many literary critics, who have noted “Pound’s refusal to provide a coherent ending,”¹⁹ and have found that the various conclusions in the *Drafts & Fragments* bring the poem to an end in “an appropriately indirect, but rather pathetic manner,”²⁰ or, more positively, that *The Cantos* could only have an “open-ended and relaxed finale.”²¹ On the whole, critics have found either a cogent conclusion or structural closure “beyond the poem’s horizon.”²² Whether or not critics find disappointment or a philosophical *comme il faut* in *The Cantos’* lack of an ending, during and immediately after World War II many yearned for the end of Ezra Pound, citizen or author. In 1942 Eunice Tietjens denounced Pound’s radio broadcasts as “enemy propaganda,” writing:

That it should be one of the poets who is thus playing Lord Haw-Haw, no matter how ineffectually, seems to cast a slur on the whole craft. In the name of American poetry, and all who practice the art, let us hope this is the end of Ezra Pound.²³

I argued in Chapter Five that Pound’s inconvenient politics forced the hand of some of the aesthetic criticism in the 1940s and 50s, where attempting to shore up the damaged fence between the “objective” realm of aesthetic value and the subjective

¹⁹ Michael André Bernstein, *The Tale of the Tribe: Ezra Pound and the Modern Verse Epic* (Princeton: Princeton University Press, 1980), 125.

²⁰ Leon Surette, *A Light from Eleusis: A Study of Ezra Pound's Cantos* (London: Oxford University Press, 1979), 260.

²¹ Massimo Bacigalupo, *The Formed Trace: The Later Poetry of Ezra Pound* (New York: Columbia University Press, 1980), 489.

²² Balachandra Rajan, *The Form of the Unfinished: English Poetics from Spenser to Pound* (Princeton: Princeton University Press, 1985), 295.

²³ Eunice Tietjens, “End of Ezra Pound,” *Poetry* 60.1 (April 1942): 40.

realm of political corruption and barbarism necessitated an end to authorship as they knew it. We now recognize the New Critical project for grounding literary criticism in logical methods as something of a failure, particularly in the aim of separating the author from the text. The Intentional Fallacy and the impersonal method of the New Critics did not bring about a true “end” of the author, as we saw in Barthes and Foucault’s accounts of the author—whether as subject, signifier, function, or text—growing, dividing, and disseminating like a tumorous cell.

And it is perhaps the specter of propaganda and poetry meeting in the work of Ezra Pound that provides the staunchest challenge to a critical notion of the autonomous text, an objective vessel of value closed to political ideologies and world events. We should remember that Adorno’s famous statement in 1951 about the “end” of poetry implicates not simply poetry as some special genre of expression, but the very possibility of critical thought; critique and criticism are equally, if not more, implicated in his statements:

Cultural criticism finds itself faced with the final stage of the dialectic of culture and barbarism. To write poetry after Auschwitz is barbaric. And this corrodes even the knowledge of why it has become impossible to write poetry today. Absolute reification, which presupposed intellectual progress as one of its elements, is now preparing to absorb the mind entirely. Critical intelligence cannot be equal to this challenge as long as it confines itself to self-satisfied contemplation²⁴

²⁴ Adorno, Theodor. “Cultural Criticism and Society,” in *Prisms*. Trans. Samuel and Shierry Weber (Cambridge, MA: MIT Press, 1983), 34. The original publication date of the essay is 1951. Adorno might be said to be *the* critic of the axiomatic, as he

It is crucial that we recognize that Adorno's point of reference is on the move in this passage; he quickly dispenses with poetry, and the remainder of his remarks concern critique, that is, "the knowledge of why it has become impossible to write poetry." While the possibility of expression is implicated, he is not making a statement that poetry is an inane aesthetic pastime or a solipsistic contemplative act. Instead he is arguing that critics, including himself, cannot hover above culture, nor take an attitude toward any discourse—poetic, critical, philosophical, or otherwise—as transcending ideology. In this way reifying and closing off of the poem through the principle of aesthetic autonomy and suspending the poem in a self-referential loop, the *modus operandi* of the New Critics, certainly may constitute one example of cultural criticism "confining itself to self-satisfied contemplation."

That said, Adorno's remarks on poetry after Auschwitz are most often taken as an assertion of the gulf between experience and representation. This meaning conforms much better to another, and critically neglected, passage, from Adorno's article on Beckett's *Endgame*, published ten years later in 1961:

One can only speak euphemistically about what is incommensurable with all experience, just as one speaks in Germany of the murder of the Jews [. . .] bombed-out consciousness no longer has any position from which it could reflect on that fact.²⁵

writes in *Minima Moralia: Reflections on a Damaged Life* (London: Verso, 2005), also from 1951: "The whole is false" (an inversion of Hegel's *Das Wahre ist das Ganze*) (50) and "No measure remains for the measure of all things" (63).

²⁵ Theodor Adorno, "Trying to Understand *Endgame*," trans. Michael T. Jones, *New German Critique* 26 (Spring-Summer 1982): 123.

While this passage speaks to the potential impossibility of reflection and representation, it is in the context of an explanation of how Beckett's *Endgame* nevertheless manages to do both through a euphemistic, vague, and cryptic mode; as Adorno writes: "Beckett keeps it nebulous."²⁶ And, I would argue, Stein's "nebulous" excursions into the logic of clouds and heaps in *Tender Buttons* similarly allow her to challenge the seeming logical gulf between vague reality and formal representation. Stein does so not through euphemism or vagueness, however, but rather by wresting order out of a reality that she knows is clouded by concepts (rather than, from the postmodern perspective, entirely created by concepts). She pulls the concepts apart, laying logic bare in order to build it anew, creating new values beyond the binary logic of "heap" and "not-heap," and giving form to objects in a mode that is "not ordinary" but at the same time not "unordered."²⁷

In the opening lines of *Endgame*, Beckett takes us immediately away from the chessboard as a scene of clear, geometric finitude to the chessboard as the breeding ground of the impossible heap, invoking both the Sorites paradox and the chess parable of exponential growth, where one grain of wheat on one square grows to the impossible 18,446,744,073,709,551,615 grains in the final square. Beckett places the ancient problem in a modern context. We are never far away from the chessboard as the scene of warfare, and for Beckett's moment and our own, the impossible heap is one of bodies, victims of endless war. And it is particularly the twentieth century's most unthinkable heap, the bodies of the death camps, which figured a potential "end" for poetry, philosophy, and rationality, where the

²⁶ *Ibid.*

²⁷ Stein, *Tender Buttons*, 461.

paradoxes of language, such as the impossibility of representing the vague heap in logical form, consolidate in the aporia of the unrepresentable.

Much of the post-war debate in philosophy and literary criticism, following Adorno, has hinged on this “crisis of representation”²⁸ following the Second World War, where many questioned whether representation—in poetry, philosophy, criticism, or in political and historical discourse—can capture the realities of the Holocaust, history’s unthinkable, unsayable, unconceptualizable. As we saw in Chapter Four, journalists and poets alike asserted the discovery, at the advent of WWI, of “the poverty of language.”²⁹ After another war and the atrocity of the camps, that poverty becomes a bankruptcy, an insuperable deficit beyond any possibility of replenishment. Does the heavy heap of bodies, and the argument that this mass murder was legitimated by the extension of the Enlightenment values of reason and cohesion,³⁰ figure the end of the possibility of logic, of representation?

The various “failures” of modernist coherence are often read as examples of modernism’s butting up against such an end of reason, as artists discover the impossibilities of realist representation which converts the paradoxes of linguistic control into insuperable gulfs between experience and representation. But it is my

²⁸ For more recent and nuanced accounts of this crisis, see the work of Jean Luc Nancy, particularly *The Ground of the Image* (Bronx, NY: Fordham University Press, 2005), Sara Guyer, *Romanticism After Auschwitz* (Stanford, CA: Stanford University Press, 2007), and J. Hillis Miller, *The Conflagration of Community: Fiction Before and After Auschwitz* (Chicago: University of Chicago Press, 2011).

²⁹ “War, as Editors See It,” 21.

³⁰ In *Dialectic of Enlightenment* [1944] (Stanford, CA: Stanford University Press, 2002), Adorno and Horkheimer recognize that the Holocaust is not the irruption of the unthinkable into an otherwise rational and progressive society, but the *product* of the Enlightenment’s logical organization, where “Everything—even the human individual [. . .] is converted into the repeatable, replaceable process, into a mere example for the conceptual models of the system” (65).

contention that we too often read modernism, and particularly texts like *The Cantos* and *Tender Buttons*, from the postmodern “endgame,” where the failure of coherence in Pound’s schema or the play and embrace of linguistic “anarchy” in Stein’s poetics become evidence of a similar divestment in reference and truth akin to the cardinal conclusions of postmodern theory. Taking this uncomplicated view, we only see paranoia and tragedy (Pound) rather than a working investment in synthesis, or glib iconoclasm and parody (Stein) rather than the markers of an epistemic commitment to order. We might choose instead Wittgenstein’s uneasy “peace” for philosophy, bracketing the real and accepting the linguistic limits on truth claims; but this carries the potential of landing us in that “self-satisfied” complacency that Adorno addressed. After all, as Adorno writes in the context of the “catastrophies [sic] that inspire *Endgame*”: “The violence of the unspeakable is mimicked by the timidity to mention it.”³¹ Or, in his later *Negative Dialectics*, “the need to give voice to suffering is the condition of all truth.”³²

The unthinkable is, paradoxically, the unforgettable. In 1945, author Albert Maltz suggested an epitaph for the tombstone of (yet still-living) Pound: “Here lies Ezra Pound, poet, who sought to betray Man to fascism. He was executed by the will of the people of the United States.”³³ Unlike those we saw in Chapter Five who called Pound a “good poet” but a “bad man,” Maltz recalcitrantly etches the status of “poet” on Pound’s hypothetical tombstone. In advocating Pound’s execution in this way,

³¹ Adorno, “Trying to Understand *Endgame*,” 126, 123.

³² Theodor Adorno, *Negative Dialectics*, trans. E. B. Ashton (New York: Seabury Press, 1973), 17-18.

³³ Albert Maltz, “Should Ezra Pound be SHOT?” *The New Masses* (November 25, 1945): 4.

Maltz asks his readers: “Do I sound savage? Yes—I remember the corpses of Buchenwald, Dachau, Maidanek. Who dares forget them?”³⁴

If we do not dare to forget, we cannot complacently dwell in the aporia. The allegedly unrepresentable is also the undeniable suffering of millions. Similarly, the logical impossibility of the heap does not, cannot, cancel out the irrepressible *truth* of the heap, the material—we need face both the abject *and* the object. In pursuit of those truths beyond the limits of logic, axiomatic modernism is impetuous and stalwart; it is not timid in the face of things. As Stein writes in the *Rooms* section of *Tender Buttons*: “Lying in a conundrum. Lying so makes the springs restless, lying so is a reduction, not lying so is arrangeable.”³⁵ While we tend to think of modernist thinking as preoccupied with “endings” in the will toward totalizing, completing, and closing systems of knowledge, it is possibly rather the seemingly open discourse of postmodern thought that is obsessed with endings, particularly in viewing the Holocaust as representation’s endgame. Philosopher Alain Badiou specifies this “final stage” thinking as an impetus for his own philosophy, referring to contemporary discourse as “the standard-bearer of the ‘end of metaphysics.’”³⁶ He writes in his *Manifesto for Philosophy*:

For conceit turns into dangerous deficiency when our philosophers, from the axiom putting the accusation of crimes of the century at philosophy’s door,

³⁴ *Ibid.*

³⁵ Stein, *Tender Buttons*, 503.

³⁶ Alain Badiou, *Manifesto for Philosophy*, trans. Norman Madarasz (Albany: State University of New York Press, 1999), 128. French original published in 1989.

draw the joint conclusions of philosophy's impasse and the unthinkable nature of the crime.³⁷

Badiou's use of "axiom" here is crucial, and not just because his discourse will heavily rely on mathematics, particularly axiomatic set theory. By labeling the alleged deficiency in the face of the "unthinkable" as contemporary philosophy's "axiom," he accuses postmodern discourse of the same dogmatic claims of closure typically reserved for modernist thinking:

It is never really modest to declare an "end," a completion, a radical impasse. The announcement of the "End of Grand Narratives" is as immodest as the Grand Narrative itself, the certainty of the "end of metaphysics" proceeds within the metaphysical element of certainty [. . .]³⁸

Philosophical theory in recent decades, following Badiou, has proposed renewed commitments to thinking being, the object world, and even passé concepts like "truth," and in so doing, moving beyond the human-world gulf suggested by postmodern thought. This gulf is given two prominent figurations, which I locate in Beckett's two-fold allusion in the "impossible heap"—the unthinkable nature of the Holocaust and the inaccessible object world. I'd like to suggest that these "new" projects in philosophy in recent decades, particularly those which incorporate the forms and concepts of abstract mathematical formalism, figure an echo of axiomatic modernism.

Criticism in the latter half of the twentieth century was dominated by postmodern and poststructuralist thought; in the late 1980s and 1990s, some began

³⁷ *Ibid.*, 30.

³⁸ *Ibid.*, 30-31.

to push-back against a reigning paradigm of epistemic finitude—that is bracketing or denying reality outside of the forms of thought, language, and the social. This is evident in investments in social and historical truths that nevertheless gesture toward the absolute and essential, such as Edward Said’s call to return to the collective values of humanism and democracy, Martha Nussbaum’s cosmopolitanism, Gayatri Spivak’s “strategic essentialism,” and Terry Eagleton’s argument in *After Theory* that we must turn back to absolute truths such as the evils of racism or capitalism. At the turn of the twenty-first century, this interest in epistemological compromise in order to assert *values*, which did not necessarily violate the postmodernist axiom of social contingency, went beyond the strategic to include a renewed commitment, post “science wars,” to something resembling scientific *fact*, or the possibility of an objective reality. We see this in Bruno Latour’s very public lodging of a complaint that his own theories about the contingency and uncertainty involved in scientific fact-building had fed conservative strategists, who utilized these notions to avoid confronting global warming and the greenhouse effect.³⁹

In the first decades of the 2000s, we are now finding our way through two ongoing “turns” in critique that attempt to go beyond the discursive and toward the material. One, the “affective” turn,⁴⁰ involves a concern for experiences that fall outside of representation’s prevailing paradigm: embodiment, feeling, the affective and cognitive, the human and other life systems, and so on. This interest in pleasure,

³⁹ Bruno Latour, “Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern,” *Critical Inquiry* 30 (Winter 2004): 225-248.

⁴⁰ See for example Patricia Ticineto Clough and Jean Halley, eds., *The Affective Turn: Theorizing the Social* (Durham, NC: Duke University Press, 2007).

for bodies that matter, paradigms of intimacy, the aesthetics and politics of sensation, and so forth, clash with still-dominant aspects of our critical heritage, the linguistic turn's emphasis on the disembodied systems of rhetoric and semiotics. Affect theory shares a common goal of finding a way past the limits imposed by the long deconstructivist era with another and more recent development in philosophy and criticism, the "ontological" or "speculative turn,"⁴¹ which involves a concern for the material, often the non-living object, and attempts to re-invest philosophy with a commitment to being and to "the real." Theorists who may be said to constitute the speculative turn often take up mathematics and analytical logic in new ways previously denied by contemporary critical discourse as their way to think ontology over epistemology.

This other step beyond the philosophies of linguistic access is affect's fraternal twin. Possibly an evil twin, too, as it dances at the edges of distasteful totality. Revisiting the possibility of scientific and philosophical notions of truth isn't easy for continentally inflected criticism. Abstract mathematical forms tend to bring with them notions like "absolutes" and "truth" which overstep epistemological decorum, as reflected in Bruno Latour's uneasy statement: "Why does it burn my

⁴¹ See particularly *The Speculative Turn: Continental Materialism and Realism*, eds. Levi Bryant, Nick Srnicek, and Graham Harman, (Melbourne, Australia: re.press, 2011). Related to this turn are various "schools" of theory grouped under a rough category of the "new metaphysics," but with myriad and crucial differences. On the one hand are the discourses most of concern here, which engage the mathematic to find their way around the subject, Object-Oriented-Ontology (OOO), Onticology, the New Realism, and Speculative Realism. Then there are discourses which straddle the affective and the ontological: Actor-Network-Theory (ANT), Vitalism, New Materialism. We might also add Post-Humanism, which would cause us to reflect on the newer schools' debt to the materialisms of materialist feminisms, embodiment theories, and affect theory.

tongue to say global warming is a fact whether you like it or not?"⁴² That is, asserting *facts, reality*, or a world "beyond" human subjectivity and/or language seems like critical treason in our current era. This is why the current critical interest in ontology resembles the dialectical cartwheels of axiomatic modernism—neither is a simple return to modernity's version of the transcendental fact nor the Enlightenment project of complete, pure reason. Both grant that we live in a Derridean world, in which all structures may be as instable and incomplete as the poetic. But each strives to fight against those linguistic limits, to give form to experience and to represent the material in ways which fall outside the dominant paradigm of representation.

The contemporary mathematical turn in continentally-inflected philosophy, initiated by the work of Alain Badiou,⁴³ and the "later" Latour, returns to and

⁴² Latour, "Why Has Critique Run out of Steam?", 227.

⁴³ Badiou, critical of the turn away from Being and Truth after Heidegger, returns to abstraction—mathematical formalism—in order to discuss the concrete. His *Being and Event* (New York: Bloomsbury Academic Press, 2013; French original 1988) figures an unexpected pressing of analytic forms into the service of continental philosophy, coupling mathematical procedures with poetic assertions, using mathematical logic as a foundation for philosophical exploration within a poststructuralist framework of infinite relational possibilities. His narratives are poetic, tropological, allusive, but he staunchly avoids constructivist thought, supplementing, sometimes even rejecting, the linguistic turn and the reign of epistemology and seeking out an ontological alternative. Badiou uses set theory as his basis for ontological commitment. In *Being and Event*, Badiou gives us this schema: there is *Being*, the realm of ontology, which contains entities which we can say exist, and is also forward-looking to those which may become able to be said to exist (inasmuch as set-theory provides a framework to think the infinite extension of being). Then there are *Events*, the previously unthinkable (like the Holocaust) eruptions of newness which defy our previous description of the order of things but nevertheless can come to be counted and thus represented in adapted frameworks. Axiomatic set theory allows for speculation, for remaining open to those unforeseen elements still to be "counted." In this way the event, though it at first may stop us in our tracks, also moves us forward.

challenges the notion that our access to reality is limited by thought (and by extension, language). This critical commonplace is termed by Quentin Meillassoux⁴⁴ the “correlationism” of Kantian epistemology (drawn particularly from the *Critique of Pure Reason*). This philosophical disposition of limited “access” restricts philosophy to examining how human cognition structures the world, rather than investigating the world as such, and continues in poststructural discourses which center on finitude (Meillassoux’s main antagonist), the conceptual construction of the object world (a commonplace Ray Brassier⁴⁵ will invert in his work), and the

⁴⁴ In *After Finitude: An Essay on the Nature of Contingency* (New York: Bloomsbury Academic, 2010), Quentin Meillassoux attacks philosophical “correlationism”—that is, the impulse to correlate thought and being, “the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other” (5). For Meillassoux, mathematics provides the way by which one can think the absolute of unknowability; it is both de-totalizing and absolute at the same time:

from its inception, the mathematization of the world bore within it the possibility of uncovering knowledge of a world more indifferent than ever to human existence, and hence indifferent to whatever knowledge humanity might have of it (116).

Meillassoux’s absolute, the only necessary law of the world, is radical contingency. Meillassoux’s radical contingency works against causality, because any given cause might elicit hundreds of effects, and those causes and effects, he claims, are *indifferent* to human subjectivity. In other words, everything that is could always have been something else—to grasp “what is” is to think with and beyond it to all of its possibilities. Meillassoux undoes the distinctions between logical necessity and radical contingency; instead he marries them, upending Kant’s distinctions between “dogmatism” and “critique” (much like, I would argue, Pound redefines the “dogmatic” in exploring the definable logic within and along with the radical contingency of a chess game).

⁴⁵ In his work, Ray Brassier argues that the world is “not designed to be intelligible and is not originally infused with meaning” (47). There will always be a “gap” or “discrepancy” between “what our concept of the object is and what the object is in itself” (55). But Brassier suggests a view he ascribes to scientific thinking, that the “reality of the object determines the meaning of its conception,” rather than metaphysical philosophy’s typical finding that conception, or thought, necessarily determines the object (55). [Ray Brassier, “Concepts and Objects,” in *The Speculative Turn: Continental Materialism and Realism*, 47-64.] We might compare Brassier’s

human-world gap (which Graham Harman⁴⁶ will argue isn't the only philosophically interesting, or ethically compelling, "gap" going). For some of these theorists, this kind of self-reflexive philosophy is as ethically abhorrent as the Adornian self-satisfied criticism: what Levi Bryant calls an "indifference about the world" which neglects real commitments to the non-human and the non-animal in its "the desire

inversion here to Pound's strangely Kantian yet anti-Kantian epistemology in "Axiomata," where he claims that our consciousness "is incapable of having produced the universe" (Ax. I.2), and also "incapable of accounting for how said universe has been and is" (Ax. I.6), because "the intimate essence of the universe is *not* of the same nature as our own consciousness" (Ax I.1). (Ezra Pound, "Axiomata," *The New Age: A Weekly Review of Politics, Literature, and Art* (13 January, 1921): 125-26).

⁴⁶ Graham Harman has published many books in the last decade which counter human or subject-centered metaphysics. The imperative to bring "things-in-themselves" back into philosophical discussion is a refrain throughout his work, including *The Quadruple Object* (Winchester: Zero Books, 2011) and *Towards Speculative Realism: Essays and Lectures* (Winchester: Zero Books, 2010). The most compelling aspect of Harman's work is his insistence on expanding our philosophical schema beyond the human-world gap to think about other gaps and relations, such as the relations among objects. In *Tool-Being: Heidegger and the Metaphysics of Objects* (Peru, IL: Open Court Publishing, 2002), he claims that the "true chasm in ontology lies not between humans and world, but between *objects* and *relations*" (2). Thus, in the case of a bridge,

No description of the bridge by a human being, and no touching of the bridge by the sea or hill that it adjoins, can adequately mimic the work of this bridge in its being. No perception of the bridge-thing, however direct a perception it may be, can accomplish the very actuality that the bridge brings about [. . .] Even if we were to catalog exhaustively the exact status of every object in the cosmos vis-à-vis this bridge, it would still be possible to conceive of other entities that might occupy a different stance or relation to it, if only they had entered the fray of the world (*Tool Being* 225)

This seems very compelling, especially for thinking the relation among objects in, say, *Tender Buttons*, or alongside Whitehead's process philosophy. But Harman concludes from these rich avenues: "In this way, bridgebeing is sheer reality, devoid of all relation. Tool-being withdraws not just behind any perception, but behind any form of causal activity as well" (*Tool Being* 225). His ontology, and the possibility of thinking, writing, advocating for, etc. the material world seem to unravel if we see being as "devoid of all relation." That said, Harman's work figures a definite echo of Stein's definition of an entity as "a thing in itself and not in relation" (see Chapter Five).

for a comfortable mastery granted by the armchair and the self-reflexive turn.”⁴⁷ Similarly, Jane Bennett argues that the main concern for the “material” that does arise in poststructural discourse is only concerned with the material as it describes human social structures and constraints—that is, historical materialism. To counter the “narcissistic reflex of human language and thought,” she advocates, instead, a “vital materialism” which understands matter as powerful, rather than brute, passive, and inert.⁴⁸ Timothy Morton, like Bryant and Bennett, attempts to re-orient our sense of the flows of power around the subject-object relation; unlike Bennett, who encourages an “irrational love of matter,”⁴⁹ Morton’s work comments on the humiliation and horror that humans can, and must, experience in acknowledging the power of the material.⁵⁰ The poststructural worldview, according to Morton, is a fantasy; we can no longer resist relating directly to the object world because things like pollution, oil spills, and global warming are not only here to stay, they are pressing in upon us. Contrary to being inside aesthetic or linguistic bubbles, with a gulf between the subject and object, we are “always inside” objects, and we cannot escape.⁵¹

⁴⁷ Levi Bryant, “Onticology—A Manifesto for Object-Oriented Ontology, Part 1,” *Larval Subjects*.

⁴⁸ Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham, NC: Duke University Press, 2010), xvi. I include Bennett in this discussion because of her comments on the subjective and anthropocentric solipsism of linguistic access theory, but she is more accurately grouped with the new materialisms and feminist materialisms than with the speculative realists/000 camp.

⁴⁹ *Ibid.*, 61.

⁵⁰ Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis, MN: University of Minnesota Press, 2013), 132.

⁵¹ *Ibid.*, 17, 132.

While there are many competing notions within the countermovement(s) against philosophies of access, and no grand unified theory describing the work of figures in this loosely defined camp, we might characterize their work as whole as positing the possibility of thinking reality (previously understood as outside thought) and, if not closing, at least diminishing the human-world gap.⁵² For some, like Badiou, the inaccessibility they counter is the “event,” whether the Holocaust or otherwise. For others, it is the object, the absolute, the material, even “truth.” Crucially, there is not a reinvestment in naïve empirical realism, but a sense of reinvigorating philosophical thinking and grasping for something else. I very deliberately did not read the axiomatic modernist grappling at this *something else* alongside these thinkers *within* my chapters, because I believe the work of rethinking philosophical categories already inheres in the poetic works themselves so as to make any particular *application* of theory unnecessary, but also because as a critic myself I am not entirely convinced that this variegated school of philosophy presents a way out of the “yawning gap”⁵³ between text and context, representation

⁵² In a series note for works in their “New Metaphysics” series for the Open Humanities Press—which has published Bryant (*The Democracy of Objects*, 2011) and Morton (*Realist Magic: Objects, Ontology, Causality*, 2013), among others—editors Latour and Harman write:

The world is due for a resurgence of original speculative metaphysics. The New Metaphysics series aims to provide a safe house for such thinking amidst the demoralizing caution and prudence of professional academic philosophy. We do not aim to bridge the analytic-continental divide, since we are equally impatient with nail-filing analytic critique and the continental reverence for dusty textual monuments. We favor instead the spirit of the intellectual gambler, and wish to discover and promote authors who meet this description. [<http://openhumanitiespress.org/new-metaphysics.html>]

⁵³ Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1993), 55.

and target.⁵⁴ Rather I want to suggest here that this school of thought parallels axiomatic modernism, particularly in its use of mathematical form to ride the line between modernist and postmodernist thinking; in its situating itself as a “countermovement” against the axioms of previous philosophical ages, particularly Kant and Descartes; in its will to get outside transcendentalist thought; and most importantly, in its belief that maybe we *can* get at things in themselves. Add to this its relentless invocation of *the new*—new ontologies, new realisms, the new metaphysics—and perhaps we may better see it as not merely holding an affinity with, but as a *legacy* of, axiomatic modernism.⁵⁵

⁵⁴ Add to this a conspicuous lack of female voices, and a general dearth of appreciation for the contributions of poststructural and materialist feminist theory, which arguably make this new work possible. Perhaps the most deflating critique of these movements in contemporary philosophy can be drawn not from a contemporary thinker, but from Theodor Adorno’s article on Beckett’s *Endgame*: “ontology asserts the universality valid in a process of abstraction” and “appeals to those who are weary of philosophical formalism but who yet cling to what is only accessible formally” (123, 124). In other words, to use mathematical formalism to speak of ontology seems to place one back inside the discourse of “access” pretty quickly.

⁵⁵ The “new materialism,” despite its moniker, doesn’t quite fit in in this analysis and thus is not included here. Though I argue that both Stein and Pound try to make words into *things*, it would not be accurate to cast Stein and Pound as subscribing to a monist ontology (that is, positing a single ontological category for subjects and objects), which characterizes much of the work of the new materialisms. Though I argue Stein is attempting, in *Tender Buttons*, to think ontology outside of the strict divide of subjects that do and objects that don’t, a “flat” ontology would not be in keeping, I think, with Stein’s distinction between entity and identity as discussed in Chapter Five. Nor would this approach conform with Pound’s distinction between the natures of subjectivity and the real in “Axiomata,” where he offers that “the intimate essence of the universe is *not* of the same nature as our own consciousness” (Ax I.1, “Axiomata,” 125). Though there is very productive overlap between the new materialisms and my focus on *becoming* and *topology* in Stein’s poetics, I resist generalizing the axiomatic modernist spirit to encapsulate the work of the new materialisms, heavily influenced by Deleuze, such as the “neo-materialisms” of Manuel De Landa and Rosi Braidotti; the critiques of linguisticism by Vicki Kirby (despite her apt engagement with mathematical form); the “agential

Ultimately, what connects the object-oriented- and set-theoretical-ontologists, the speculative realists, the new metaphysicians, and the axiomatic modernists like Stein and Pound, is an intrepid attempt to *write their way closer to objects*. A more modest version of this quest inheres in Latour's claim that "the question was never to get *away* from facts but *closer* to them, not fighting empiricism but, on the contrary, renewing empiricism."⁵⁶ A more radical version comes from Stein's method of "looking at anything until something that was not the name of that thing but was in a way that actual thing would come to be written."⁵⁷ For Stein and the new metaphysicians, an ethical relationship to things-in-themselves involves resisting (even if there is no true surmounting) an anthropocentric gaze; what Stein calls, in privileging *entity* over *identity*, "seeing that thing" in such a way that "we see it without turning it into an identity."⁵⁸

All of this is to say, among many other things, that when literary modernism pursues the axiomatic method it does not simply eventuate in postmodern thought. Postmodern thinking replaced the paradox with the aporia. The now canonical, Lyotardian definition of postmodern art as witnessing the unrepresentable *sans* nostalgia, as recognizing the gulf between the idea of political emancipation and its realization and maintaining it, reifies the inability to give form to the event, whether the horror of the camps or anything else, or to grasp the "in itself" of the object.

realism" of Karen Barad; or the "flat ontology" of Sallie Marston, Keith Woodward, and John Paul Jones III. This is in part because I am attempting to draw out specifically the impetuous, brash insistence upon newness and philosophical "heresy" I see in axiomatic modernism and the OOO/speculative realism critics, a camp that is still somewhat clouded in critical suspicion.

⁵⁶ Latour, "Why Has Critique Run Out of Steam," 231.

⁵⁷ Stein, *Lectures in America*, 237.

⁵⁸ Stein, "What Are Master-Pieces," 10.

Although there seems to be a critical conveyor belt between the impossible heaps and self-referential paradoxes of modernism and the human-world gap of postmodernism, I argue that we should resist that logic. The gap is an insufficient paradigm for the mathematical excursions of axiomatic modernism, not least of which because it was preoccupied with *filling gaps*: Pound and Fenollosa's project of filling Roman characters with the same substance or presence they ascribed to Chinese characters; Pound's chessboard filling with light rather than emptying of pieces, like the space-filling curves of Peano and Hilbert; Dedekind's cuts in the real number line that are immediately filled with the irrationals, the infinitesimals; Stein's "breaks" throughout *Tender Buttons* which are not losses, gaps, or divides, but "fillings."⁵⁹ We might add, too, that the linguistic turn in mathematics in the modernist period prompted some philosophers and mathematicians to grant ontology to number and other mathematical objects, thrusting new objects into our ontological ranks, just as the ontological criticism of our moment is not just rejecting the notion of inaccessible being but arguing for a proliferation of beings, such as Latour's "quasi-objects" and Morton's "hyperobjects."⁶⁰

To return to the opening question of this "conclusion"—do we deprive art of its character in highlighting this tendency within modernism toward the axiomatic and suggesting that the negotiation of access to the object world through mathematical forms in art may be doing something *more productive* than asserting

⁵⁹ For instance, two moments from "A Plate": "nothing breaking the losing of no little piece" and a "plan that has that excess and that break is the one that shows filling" (Stein, *Tender Buttons*, 466).

⁶⁰ Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis, MN: University of Minnesota Press, 2013).

the human-world gulf? Adorno might say so. In his writing on *Endgame*, he argues that “art is different from the discursive cognition of the real, not gradually but categorically different from it,” so, “if art simulated the state of reconciliation [with objective reality] by surrendering to the mere world of things, then it would negate itself.”⁶¹ Adorno denies art’s ability to fully “reconcile” with the object world. Even in “realist” art that holds to the notion of an objective or stable real, there will still be a necessary antimony between the “realm of subjectivity” necessary for art and the “binding universality of objective reality.”⁶² That said,

The dignity of art today is not measured by asking whether it slips out of this antimony by luck or cleverness, but whether art confronts and develops it. In that regard, *Endgame* is exemplary⁶³

And I would argue, in that regard, the poetics of Stein and Pound that I have labeled “axiomatic modernism,” are exemplary. Yes, perhaps, their work is marked by the attempts to “slip out” of paradoxes and antimonies by cleverness. But because they *cannot*, their poetics instead confront and *develop* that antimony.

Logical paradoxes like the paradox of the heap and the self-referential paradox imply that the real is necessarily richer than formalization. The “impossible heap” stands in for this sense that experience will always exceed representation, that the dimensions of the material surpass the abilities of language. The self-referential paradox similarly demonstrates how language is consistently self-defeating in its will to make reference to an external reality. But the paradox is not

⁶¹ Adorno, “Trying to Understand *Endgame*,” 127.

⁶² *Ibid.*

⁶³ *Ibid.*

operable, it is not a *paradox*, unless there is an investment in the possibility of truth claims, however that truth may be undermined by either future evidence or the mutiny of one's language. Axiomatic modernism is characterized by both the philosophical doubt that experience exceeds existing modes of formalization and a robust faith in the possibility of giving form to experience; it may even be said that for Stein's and Pound's poetics the very *purpose* of making forms is the possibility of accuracy and truth.

The New Critics suggested there was nothing outside the text, that is, that the text is a closed system. Deconstruction would counter that there is nothing outside the text in a different sense—that there is no “outside-text”, no transcendental signified or reality independent of language—no stable reality that the models refer to. Foucault's claim that “today's writing has freed itself from the theme of expression. Referring only to itself, but without being restricted to the confines of its interiority,”⁶⁴ certainly opens the text beyond the “confines” imposed on it by the New Critics, but this cannot apply to axiomatic modernism, which did not “free itself” from the endeavor of expression, nor was it a project bent on doing so. We cannot follow to any logical conclusion a claim that Stein's or Pound's language is purely auto-referential, that the referential mode, in terms of hailing external objects, is not invoked. Foucault's sense of “today's writing” as auto-referential explicitly clashes with Stein's claim in *The Geographical History of America* that

the writing of to-day has to do with the way any land can lay when it is there particularly flat land. That is what makes land connected with the human

⁶⁴ Foucault, “What is an Author?”, 206.

mind [. . .] I can say I say so but what I do is to write it so. This is not the way the land looks but the way it lies that is now connected with the human mind.⁶⁵

Stein's writing, as she understands it, springs from the human mind, which manages to transcend the constructed and limited view of the subject (the way land "looks" from the ground) to make contact with things-in-themselves (the land itself, and the way land "lies"). For Stein, the domain of abstract geography, like the domain of mathematics, is the human mind, and her writing, when it works, springs from the objective realm of the human mind rather than the subjectivity of human nature. Stein and Pound's poetics are not only committed to the rigor of mathematical logic, they are exemplary of a modernism that does not fully break with mimesis, that does not consider the work of art as an object with no necessary relation to the external world. They sought to make words things, but to have those things still *mean* things. Axiomatic modernism sought to make poetic statements operate like equations, backed by the gold standard of reality. Pound used poetry to make "dogmatic statements" and "equations for human emotions,"⁶⁶ and Stein attempted to make poetry "as exact as mathematics"⁶⁷ even when to "be completely right"⁶⁸ might involve "beginning again" and again.

That is to say, the self-consciousness of literary language is not tantamount to the self-referential paradox. That is, the paradox arises not *merely* in the case of representation's acute awareness of its potential falseness. The paradox would

⁶⁵ Stein, *The Geographical History of America*, 79.

⁶⁶ Pound, *Spirit of Romance*, 14.

⁶⁷ Stein, *How Writing is Written*, 157.

⁶⁸ Stein, *The Making of Americans*, 574.

dissolve, as Wittgenstein might argue, as soon as we *grant* that truth is, inalterably, an illusion. Stein's and Pound's poetics, as I have described them, are neither comfortably sure of their truth nor completely honest about not being true to an external world. They resist Wittgenstein's linguistic bubble; they attempt to escape from Nietzsche's prison house of language. Because if you stop making truth claims you are outside the realm of paradox and nowhere. Axiomatic modernism aims not to be nowhere but to be in between, in the excluded middle. As Stein writes in the *Rooms* section of *Tender Buttons*, "There is a contradiction and naturally returning there comes to be both sides and the centre."⁶⁹ The center is the excluded middle, the point between "both sides," the knife-edge on which critical thought—whether manifested in poetic expression or cultural criticism—must rest. This center may be between, as for Adorno, the hopelessness of conceptualizing terror and the imperative to give form to the suffering of millions; for Stein, Pound, and Beckett, it is the part of the continuum between contradictory elements such as bald and not-bald, heap and not-heap. *And they keep "returning there."*

The pursuit of the axiomatic is a pretty consistent protocol for landing in the center of a paradox. Because of this, the axiom emerges from the modernist period as a catachresis. But it is not only from a postmodern endgame that we recognize this—it is within the modernist period that the axiom went through this major redefinition. Once held to be a self-evident, universal, unimpeachable truth needing no formal proof, discovered and not invented, axioms emerge from the foundational crisis of mathematical modernism, particularly through the contributions of Gödel,

⁶⁹ Stein, *Tender Buttons*, 499.

as instead premises, beginnings, rules in a game. Later logicians like Quine would continue to generate axioms while also holding “no statement is immune to revision.”⁷⁰ Though we are unable, as Pound and Gödel found, to get “outside” the system in order to provide its foundation, we may still use the axiom as a starting point, a heuristic, and a stepping-stone.

When Pound reflected to Allen Ginsberg that “any good [in *The Cantos*] has been spoiled by my intentions—the preoccupation with irrelevant and stupid things,” we know the “intentions” he refers to are related to his anti-Semitism, which Ginsberg rightfully calls, though in a glib understatement, Pound’s “fuck-up.”⁷¹ But Pound’s intention was also toward coherence, wholeness, and totality, a project that even this study won’t label a success. That said, we might regard the “fragments” of that whole-that-never-was not as shards of some failed totality, but as “stepping-stones.” In his response to Pound, Ginsberg presses:

my perceptions have been strengthened by a series of practical exact language models which are scattered throughout the *Cantos* like stepping-stones—ground for *me* to occupy, walk on.⁷²

Pound’s axiomatic “exact language models” provide Ginsberg ground to occupy, to walk on, and take further steps. Badiou’s “Manifesto” similarly displays this axiomatic modernist ethic when he writes:

⁷⁰ W.V.O. Quine, “Two Dogmas of Empiricism,” in *From a Logical Point of View* (Cambridge, MA: Harvard University Press, 1980), 43.

⁷¹ “anti-Semitism was your fuck-up” Allen Ginsberg, *Composed on the Tongue*, ed. Donald Merriam Allen (Bolinas, CA: Grey Fox Press, 1980), 8.

⁷² *Ibid.*

I postulate not only that philosophy is possible today, but that this possibility does not take the form of a final stage. On the contrary, the crux of the matter is to know what the following means: taking *one more step*.⁷³

Perhaps the axiomatic modernists only discovered partial and provisional truths, but they provide us somewhere to be, not outside but inside the paradoxes of language and reality, some ground to occupy. We gain more traction on the ground than in the gap, whether we intend to walk onward, backward, inward, or outward. Even the most famous statement of modernist exhaustion and mimetic despair, a line near the end of Beckett's *The Unnamable*, demonstrates this unfailing compulsion to take one more step: "You must go on. I can't go on. I'll go on."⁷⁴

⁷³ Badiou, *Manifesto*, 32.

⁷⁴ It is fitting that I would discover, deep in the process of taking the last "steps" of a dissertation—that less-than-glamorous project of formatting footnotes, paginating, alphabetizing citations, and so forth—that Badiou has, and not at all surprisingly, written extensively on Beckett. Reflecting on his own youthful Sartrean nausea toward anything philosophically affirmative, Badiou explains how he eventually came to see beyond that still widespread "caricature" of Beckett's writing as verifying that "beyond the obstinacy of words there is nothing but darkness and void." I'll let Badiou, then, make the case that Beckett is an axiomatic modernist on my behalf (those footnotes won't format themselves):

It took me many years to rid myself of this stereotype and at last to take Beckett at his word. No, what Beckett offers to thought through his art, theatre, prose, poetry, cinema, radio, television, and criticism, is not this gloomy corporeal immersion into an abandoned existence, into hopeless relinquishment. Neither is it the contrary, as some have tried to argue: farce, derision, a concrete flavour, a "thin Rabelais." Neither existentialism nor a modern baroque. The lesson of Beckett is *a lesson in measure, exactitude and courage*. (Alain Badiou, *On Beckett* [Manchester: Clinamen Press, 2003], 40; emphasis mine).

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