

Trajectories of Peircean Philosophical Theology:
Scriptural Reasoning, Axiology of Thinking, and Nested Continua

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Abstract—University of Oxford Education Committee

The writings of the American pragmatist thinker Charles S. Peirce (1839-1914) provide resources for what this thesis calls the “nested continua model” of theological interpretation. A diagrammatic demonstration of iconic relational logic akin to Peirce’s Existential Graphs, the nested continua model is imagined as a series of concentric circles graphed upon a two-dimensional plane. When faced with some problem of interpretation, one may draw discrete markings that signify that problem’s logical distinctions, then represent in the form of circles successive contexts by which these distinctions may be examined in relation to one another, arranged ordinally at relative degrees of specificity and vagueness, aesthetic intensity and concrete reasonableness. Drawing from Peter Ochs’s Scriptural Reasoning model of interfaith dialogue and Robert C. Neville’s axiology of thinking—each of which makes creative use of Peirce’s logic—this project aims to achieve an analytical unity between these two thinkers’ projects, which can then be addressed to further theological ends. The model hinges between diagrammatic and ameliorative functions, honing its logic to disclose contexts in which its theological or metaphysical claims might, if needed, be revised. Such metaphysical claims include love as that which unites feeling with intelligibility, hell as imprisonment within an opaque circle of interpretation whose distorted reflections render violence upon oneself and others, and the divine as both the center of aesthetic creativity and outermost horizon from which our many layers of interpretive criteria emerge. These are claims made from a particular identity in a particular cultural context, but the logical rules upon which they are based are accessible to all, and the hope of the model is to help people overcome problems of interpretation and orient themselves toward eternity without ignoring the world around them.

Abstract—Department of Theology and Religion

The writings of the American pragmatist thinker Charles S. Peirce (1839-1914) provide resources for what this thesis calls the “nested continua model” of theological interpretation. The premise upon which the model is based is that the totality of determinate entities in the universe, from the mundane objects of everyday life to the most abstract interpretive frameworks imaginable, are potentially real according to the same modalities and continuous within themselves and (mostly) with respect to each other, and that such entities may be placed on a graph according to their relative degrees of specificity and vagueness, aesthetic intensity and concrete reasonableness. Imagined as an innumerable series of concentric circles drawn upon a flat surface, the graph of the model understands an interpretive framework as a ring that brings into intelligible relation the entities it contains, and which itself may be brought into intelligible relation with others as a continuum nested within other continua. When one is faced with some distinction in interpretation, one can imagine that what is distinguished are simply an “A” and a “B.” “A” and “B” may be mutually discontinuous, and indeed the logical structure of any argument is not simply that “A” and “B” are discontinuous, but that “A” is *better* than “B” (or vice versa), with evidence marshaled in support of the preference. Yet for any such distinction, there is always a third figure “C,” often implicit, which represents the rule of reasoning by which “A” and “B” are mutually interpreted and brought into relation, and which determines their respective better and worse—in another sense, their *context*. It is this “C,” this context, which is represented as a ring drawn upon the graph. The hope of the mode is that any problem or interpretive

framework can be graphed, and that the logical form for doing so—“A” relates to “B” with respect to some “C”—remains consistent across all levels of generality. Rather than referring all questions to a single mode of inquiry, the nested continua model aims to provide a vague space in which multiple modes of inquiry—none of which are presumed *a priori* to be any less real than the others—may be playfully, tentatively, *hypothetically* examined in relation to the following three things: (1) that which they explain, (2) other modes of interpretation, and (3) their relative “distances” from the poles of absolute creation and absolute eternity.

The key philosophical and logical resource for this thesis is Peirce; the key theological resources are Robert C. Neville and Peter Ochs. No thinker could be more congenial than Peirce to such a project as this one, for none has combined a trove of high-level metaphysical speculations with analyses of logical relations in such a way as to render precisely that which must remain imprecise, or to assert a meaningful relation between objects without reducing *relata* to each other or to the relation itself. For the theological dimension of nested continua, Neville and Ochs provide the project with its basic parameters within an interpretive framework of thinkers designated as trajectories of Peircean philosophical theology. To interpret the work of Neville and Ochs according to a mutual framework not only serves as a testament to the versatility of each thinker’s respective project; it also presents an opportunity to bring together two theological communities who up until now have had little to say to one another. To Scriptural reasoners, the model aims to illustrate the way in which the interpretive problems we experience within our lives and historical communities might be opened up to an elevating and expanded

participation in abstract metaphysical structures of time and eternity that reach out to those of us who are not at home in Scripture while yet exercising the same type of non-reductive triadic logic that informs their practices. At the same time, nested continua offers a specific logical program, that of critically analyzing errant binaries with respect to appropriate and inappropriate rules of reasoning, as a means of opening new pathways for metaphysical speculations to answer to real problems. In aiming to achieve an analytical unity between Neville and Ochs's respective projects, the nested continua model likewise draws from aspects of each thinker's theological insights. Following Neville, the model holds that God created the universe *ex nihilo*, that time, eternity, and norms can and should be discussed together in theology, and that every passing moment witnesses the creation of novelty that is bestowed with a normative value that it may or may not reach. Following Ochs, the model holds that our interpretations, despite being objectively linked to time and eternity, are inescapably filtered through historical and linguistic communities, the norms of which inform our habits, and that the solutions to the problems we face must respect those habits.

An important aspect of reconciling Neville and Ochs is through the development of a viably Peircean metaphysics of history. Since Neville makes a convincing case as to the intimate link between time and eternity, and Ochs an equally convincing case as to the link between historically situated communities and solutions to everyday problems, this project must show how time and history are themselves related, or rather, how "history" is the category by which eternity, through time, is encountered by the communities with which Ochs is dealing. With

the intention of rendering their respective projects at different levels of the same graph, this thesis will build upon Neville's and Ochs's affinities in axiology and vagueness to posit a simple sparse sequence of concentric circles labeled "time," "history," "faith tradition," and "participant in faith tradition." Without denying Neville's aims to bring theology into daily life, the model places his metaphysical arguments for eternity at the outermost circle on the graph. Likewise, the model locates Ochs's Scriptural Reasoning as a hermeneutics of interfaith dialogue at the levels of "faith tradition" and "participant in faith tradition." This is emphatically not intended to reduce their work to these levels alone, but merely an effort to establish the compatibility for certain aspects of their projects in the hopes of finding a means to bring together their respective insights and their theological and academic communities.

This project takes shape by way of four chapters. Chapter One, "Nested Continua in Context," aims to identify and examine those areas of Peirce's thought that most inform the nested continua model. The chapter begins with Peirce's prevailing influences, discussed as a means of providing greater context for Peirce in relation to the currents of nineteenth-century thought rather than as an exhaustive study. Influences to be examined include German idealism (Kant, Hegel, Schelling), classical and scholastic philosophy (Aristotle, Plato, Duns Scotus), mathematical and empirical logic (Boole), and American influences (Benjamin Peirce, F.E. Abbot, James). The chapter then turns to the successive areas of Peirce's work that most inform the nested continua model. The first of these are the Existential Graphs, whose demonstrations in iconic logic provide the model with its basic self-

understanding, and which are seen to draw as well from Peirce's understandings of ordinal and cardinal numbers. After the Graphs, the most important area of Peirce's philosophy to be examined are the categories of Firstness, Secondness, and Thirdness, which are treated developmentally with respect to some of their most significant modifications over the course of Peirce's life, as well as the indispensable function they perform in terms of interpreting the metaphysical implications of the model, particularly in relation to synechism. Considerable technical detail is required to show how the model's understanding of its markings/circles as "degenerate" Thirdness, "mediate" Firstness, and Secondness between "absolute" Firstness and Thirdness. Following this, such innovations in Peirce's work as his logic of abduction, prescision, and vagueness/generalality are understood in terms of nested continua's logical and hermeneutic operations. Similar treatment is also given for Peirce's writings on habit, continua, and infinitesimals, drawing primarily from Peirce's *Monist* series of 1891-93. The chapter's final section introduces the nine fundamental logical and metaphysical guidelines for operating the nested continua model.

Chapter Two, "Toward a Peircean Historiography," aims to apply Peirce's philosophy toward history as its own horizon for metaphysical speculation. The chapter begins by identifying an errant logical binary among contemporary debates over the discipline of historiography, as well as epistemological status of history with respect to its relationship with time. The analysis here is by turns critical and constructive. The critical turn, derived from Peter Ochs's textual reasoning, identifies errant logical binaries among some of the debate's leading arguments and

undertakes historical inquiry to uncover antecedent causes. To this end, the chapter identifies—in the writings of Hayden White, R.G. Collingwood, late nineteenth-century German historicist thinkers, and ultimately Kant—the roots of this particular binary. Following this, a constructive turn explores some of the nested continua model’s possibilities for philosophies of historiography and history. This entails examining certain methodological considerations in terms unique to historiography, such as the status of evidence, explanation, and counter-factual arguments. It also entails examining Peirce’s own writings on history, as well as some of the secondary literature on the subject. In its final section, this chapter discusses the relationship between history and time as nested continua.

Chapter Three, “Trajectories: Robert C. Neville and Peter Ochs,” aims to analyze the work of Peter Ochs and Robert C. Neville as contemporary manifestations of Peircean philosophical theology. This is undertaken toward understanding Neville’s axiology of thinking and Ochs’s pragmatic historiography as mutually assignable upon a graph of nested continua. The chapter is subdivided into sections dealing separately with Neville and Ochs, though its introduction does establish certain comparisons between each thinker’s career and intellectual contexts, such as the respective ways each thinker applies the notion of vagueness and argues against the fact/value distinction. Regarding Ochs’s work, the chapter aims to critique and contextualize his notion of pragmatic historiography by showing how it has difficulties accounting for historical understandings across different traditions and cultures, and that it would benefit from the broader speculative framework that synechism offers. Regarding Neville’s work, this section

of the chapter will aim to show how Neville's metaphysics of time and eternity may be applied to nested continua at its outer levels, as well as its context in relation to Whitehead's metaphysics. This section of the chapter examines Sandra B.

Rosenthal's critique of Neville's work as excessively process-oriented before arguing that Neville offers a theological vision that is congenial to the "emergent-continuity-within" implications of Peirce's synechism.

Chapter Four, "Theological Implications," aims to explore the theological speculations warranted by the nested continua model. It begins with a brief analysis of Peirce's own writings on religion, particularly his *Monist* series of 1891 through 1893 and his "Neglected Argument for the Reality of God," from 1908. Following this, it discusses some of the most important figures in terms of the religious dimension of Peirce's thought, particularly Michael Raposa and Robert Corrington. In the chapter's longest section, some of the theological implications of the nested continua model are examined at length, including the caveats that come with applying Peirce's three categories theologically—particularly the sense in which deduction is an inappropriate means of speculating upon such traditional divine attributes as freedom and supremacy—as well as the different modes of experiencing and discussing the divine. These include understanding God in terms of absolute Thirdness as immanent source of intelligibility and ultimate judgment, absolute Firstness as creator *ex nihilo* and source of chance and novelty, as well as love, change, and normativity as some of the means by which the divine is experienced in daily life. Analysis then turns toward the problem of evil, distinguishing between "accidental" and "singular" evil, as well as the distinction

between “opaque” and “translucent” circles of interpretation. The chapter then addresses the problem of supersessionism as a hypothesized example of singular evil, investigating the origins of its historical trajectories with regard to early Christian and Jewish communities, as well as aspects of the text of the Gospel of John. A concluding section touches upon various suggestions for further research.

Introduction

Thinking...consist[s] in the living inferential metaboly of symbols whose purport lies in conditional general resolutions to act. As for the ultimate purpose of thought, which must be the purpose of everything, it is beyond human comprehension...[But] by action, through thought, he grows an esthetic ideal, not for the behoof of his own poor noddle merely, but as the share which God permits him to have in the work of creation.

Charles Sanders Peirce, "Consequences of Pragmatism," 1906¹

This is the beginning of a very long metaphor. The premise upon which it is based is that the totality of determinate entities in the universe, from the mundane objects of everyday life to the most abstract interpretive frameworks imaginable, are potentially real according to the same modalities and continuous within themselves and (mostly) with respect to each other, and that such entities may be placed on a graph according to their relative degrees of specificity and vagueness, aesthetic intensity and concrete reasonableness. Imagined as an innumerable series of concentric circles drawn upon a flat surface, this graph understands an interpretive framework as a ring that brings into intelligible relation the entities it contains, and which itself may be brought into intelligible relation with others as a continuum nested within other continua. At the absolute center is the incandescent

¹ Peirce, Charles Sanders. *Collected Papers of Charles Sanders Peirce, Volumes V and VI, Pragmatism and Pragmaticism and Scientific Metaphysics*. New York: Belknap, 1935, 5.259n3. Upon the introduction of pragmatism into public discourse following William James's lecture at Berkeley in 1898, Peirce came to feel the need to distance himself from the version of pragmatism that had taken hold in the popular imagination. "Pragmaticism" was his name for his revision of pragmatism.

source of everything determinate, shining out into the space around it and eliciting their qualitative emergence in an ongoing process of creation. Just beyond the center are the semantic spaces that characterize human life as it is lived from one day to the next, its problems and commitments and emotional resonances. Further out are the communities and traditions that persist across generations, affecting the languages we speak, values we hold dear, and goals we choose to pursue. Encircling these are the remote facts of history, transmitted across centuries through objects and artifacts rendered intelligible with respect to an overarching category of “history” that brings to us cultures and civilizations no longer extant. Remoter still are the understandings of natural science, the meanings of which, whether more particular, as with biological or botanical insights, or more general, as with the claims of chemistry or physics, remain aloof from the concerns of human culture as to their claims on truth. At the furthest horizon of what is known we find the ring of time that, despite being only the fourth of ten dimensions according to the recent claims of string theory, remains the most abstract framework for understanding change within the metaphoric reach of most of our imaginations. Beyond the outermost ring, whether it be the fourth dimension, the tenth, or some other interpretive framework, lies eternity, which is simply that beyond which we cannot think, but without which the universe as a whole—and, by extension, anything within it—cannot ultimately be grounded.

This is the nested continua model of theological interpretation, or at least its cosmological dimension. It can be expressed another way, which is to erase all its circles and leave only the point at the center. When life presents a distinction of any

kind, one can imagine that what is distinguished are simply an “A” and a “B.” “A” and “B” may be mutually discontinuous, and indeed the logical structure of any argument is not simply that “A” and “B” are discontinuous, but that “A” is *better* than “B” (or vice versa), with evidence marshaled in support of the preference. Yet for any such distinction, there is always a third figure “C,” often implicit, which represents the rule of reasoning by which “A” and “B” are mutually interpreted and brought into relation, and which determines their respective better and worse—in another sense, their *context*. It is this “C,” this context, which is represented as a ring drawn upon the graph, a ring that contains its “A” and “B” (as well as the awareness of the person making the distinction). The vast majority of these potential rings are to remain undrawn, as they remain unconscious within lived experience—not necessarily a bad thing, as life presents so many indubitable interpretive contexts that one could never simultaneously graph them all, just as one could never simultaneously doubt them all—but whenever a painful problem or intractable dispute does arise, so does the need to render its context explicit. What is more, the moment such a circle is drawn it has become another determinate thing on the graph, which can *itself* be circumscribed by another ring, another rule of interpretation that renders *it* intelligible. And like a pestering child who keeps insisting to absolutely know why he has to brush his teeth before bedtime, any rule of interpretation can be potentially confronted with an ongoing series of “whys” that render ever more encircling rings intelligible, until the only thing one can say is to refer the “why” to the silent spaces of eternity itself.

To be clear from the beginning, the author does not see referring painful problems or intractable disputes “to the silent spaces of eternity” as any kind of satisfactory response to the questions of life, much less as the primary import of the nested continua model. The power of the model, rather, consists in its claim that any problem or interpretive framework *can* be graphed, and that the logical form for doing so—“A” relates to “B” with respect to some “C”—remains consistent across all levels of generality. Far from referring all questions to a single mode of inquiry, the nested continua model aims to provide a vague space in which multiple modes of inquiry—none of which is presumed *a priori* to be any less real than the others—may be playfully, tentatively, *hypothetically* examined in relation to the following three things: (1) that which they explain, (2) other modes of interpretation, and (3) their relative “distances” from the poles of absolute creation and absolute eternity. As such, nested continua is less about having an answer to every question than it is an effort to objectively determine whether one is asking the appropriate questions, which is another way of saying that it seeks to apply logic toward the cultivation of wisdom. At this point, one might object that any attempt to contextualize modes of inquiry according to a single graph is to refer these modes to *yet another* single mode of inquiry, one vulnerable to all the implicit biases and risks of imperializing other modes of discourse that the “hermeneutical turn” in twentieth-century philosophy so successfully exposed. This criticism is fair, and addressing it helps clarify precisely what this thesis aims to do.

In the preface to his book, *Normative Cultures*, Robert C. Neville explains how a given model of theology or philosophy need not close itself off to alternate modes of discourse:

A good system has built-in requirements for shifting perspectives, for trying to be as complete in examining things as we can imagine, and for repeatedly disconcerting its conceptions of what an adequate array of angles of vision might be. System is the best defense against dogmatism.²

It is a mistake to consider nested continua solely *either* as a metaphorical armature upon which to hang certain theologically laden claims *or* as an identity-shaped method of reparative reasoning; these poles are linked. The nested continua model will be seen to claim love as that which unites feeling with intelligibility, hell as imprisonment within an opaque circle of interpretation whose distorted reflections render violence upon oneself and others, and the divine as both the center of aesthetic creativity and outermost horizon from which our many layers of interpretive criteria emerge. These are claims made from a particular identity in a particular cultural context, but the logical rules upon which they are based are accessible to all, and the hope of the model is simply to help people overcome problems of interpretation and orient themselves toward eternity without ignoring the world around them. In other words, one hopes that the model may be made to hinge between its diagrammatic and ameliorative functions, honing its logic to disclose contexts in which its theological or metaphysical claims might, if needed, be revised. To discuss such logical rules, it is necessary to introduce the person who is

² Neville, Robert C. *Normative Cultures*. Albany, NY: SUNY Press, 1995, p. vii.

the definitive source for the logical and philosophical claims upon which this project is based.

The logical and philosophical resources of C.S. Peirce

Charles Sanders Peirce was born in Cambridge, Massachusetts on September 10, 1839 and died in Milford, Pennsylvania on April 19, 1914. Hailed as a genius by such diffuse figures as Noam Chomsky³ and Jacques Derrida⁴, considered America's foremost philosopher by Bertrand Russell⁵ and a "towering giant of American philosophy" by Hilary Putnam,⁶ recognized as a foundational figure in the pragmatic philosophical tradition and in sign theory (which Peirce called "semeiotic"), his name nonetheless escapes the list of those whom the general public would know as history's most renowned philosophers. Such relative obscurity owes in part to the unfortunate circumstances of Peirce's life, which led to his inability to find a secure academic posting or complete a major work following his dismissal from Johns Hopkins University in 1884, and which were exacerbated by a notoriously difficult personality characterized by substance abuse, marital infidelity, and, very likely,

³ Noam Chomsky (b. 1928) is one of the past century's most prominent philosophers of language. From his first major work, 1955's *Logical Structure of Linguistic Theory*, he has explored the formal conditions by which humans learn and employ language, arguing on behalf of innate cognitive structures that establish the parameters for virtually unlimited enactments of linguistic units.

⁴ Jacques Derrida (1930-2004) was one of the leading figures in the continental philosophical tradition. Born in Algeria, he rose to prominence in French intellectual life in the 1960's, marking the passage from structuralism to post-structuralism and famously asserting in 1967 that there is nothing outside of the text (*Of Grammatology*. Trans. Gayatri Chakravorty Spivak, Baltimore & London: Johns Hopkins University Press, 1976).

⁵ Bertrand Russell (1872-1970) is considered, alongside Gottlob Frege and Ludwig Wittgenstein, as one of the founding figures of the analytic philosophical tradition. Based primarily at the University of Cambridge over the course of his long career, he explored the ways in which philosophy and mathematics might be grounded in logic.

⁶ Putnam, Hilary. *Realism with a Human Face*, Cambridge, MA: Harvard University Press, 1990, p. 252. Putnam (b. 1926), generally associated with the American pragmatic philosophical tradition, has explored several avenues within contemporary philosophy of mind, philosophy of language, and philosophy of mathematics over the course of his career. He has taught at Harvard since 1965.

physical violence.⁷ Peirce also had a tendency to revise the technical vocabulary in his writings without warning, inventing new terms or changing their definitions abruptly in such a way as to be off-putting to readers unfamiliar with the details of his thought. Yet in terms of the contents, structure, and aims of the present project, no thinker could be more congenial, for none has combined a trove of high-level metaphysical speculations with analyses of logical relations in such a way as to render precisely that which must remain imprecise, or to assert a meaningful relation between objects without reducing *relata* to each other or to the relation itself.

In the preface of his book, *Peirce, Pragmatism, and the Logic of Scripture*, Peter Ochs eloquently captures some of the attractions of applying Peirce's writings to theological ends:

[Such attractions include] a concern to find reasonably precise ways of talking about imprecise things without losing the meaning of the imprecision itself; a belief that phenomena of everyday language, including the everyday practices of religion, are among those things; a love of critical reasoning but an acquired distrust of criticism that has lost the sense of having a purpose; disillusionment with “modern” or Enlightenment attempts to make a metaphysics—and also a religion—out of the rational critique of inherited traditions of knowledge and practice; a conviction that post-Enlightenment anti-rationalism—including romanticisms, emotivisms and a variety of totalizing ideologies of power, history, experience, and so on—may prove, logically, to be on the other side of the rationalist coin; fascination with the irrevocable contextuality—temporal, historical, linguistic, social, biological—of rational judgments, but also with their persistent “rationality.”⁸

⁷ Joseph Brent has catalogued the events of Peirce's life in all its triumph and tragedy in his work, *Charles Sanders Peirce: A Life* (Bloomington: Indiana University Press, 1998), which remains the most prominent book-length biography of Peirce.

⁸ Ochs, Peter. *Peirce, Pragmatism, and the Logic of Scripture*. Cambridge: Cambridge University Press, 1998, p. 4.

For this introduction, there are three features of Peirce's thought to be acknowledged. The first is his three categories of Firstness, Secondness, and Thirdness, which provide the model with the terms for understanding its logical relations and modes of being. The second feature is Peirce's taxonomy of iconic, indexical, and symbolic types of signification. With particular attention to iconic signification, these categories will assist in describing how the model refers to its objects. The third feature is his metaphysics of continuity, which he called *synechism*, which provides the nested continua model with its basic understandings for what entities are and how they may be seen to engage with their interpreters in a non-reductive way.

Turning first to the categories of Firstness, Secondness, and Thirdness, these categories, whose vague numerical names reflect Peirce's intention to give them the widest possible bearing, are at once principles of logical relation and metaphysical categories of the modalities of both being and experience. Like so much else in his thought, they were intermittently altered in their definitions across Peirce's career. For purposes of clarification, the following definitions of the categories—understood in terms of logic, metaphysics, and phenomenal experience—will hold throughout this thesis. Firstness is to be understood logically as monadic, which is to say as what it is irrespective of any relation, metaphysically as real possibility, and experientially as aesthetic feeling or quality. Secondness is to be understood logically as dyadic, which is to say in relation to another object or collection of objects, metaphysically as that which actually exists in distinction from something else, and experientially as brute reaction. Thirdness is to be understood logically as

triadic, which is to say as a rule of reasoning for interpreting an object or collection of objects, metaphysically as the source of intelligibility through mediation, and experientially as normative guidance to conscious thought and action. Together these categories, all of which are real—which is to say beyond what any one person or finite collection of people imagines them to be—respectively comprise all that is possible, actual, and intelligible in logic, lived experience, and the universe itself.

At the risk of overburdening the uninitiated, a preliminary effort might be made as to the placement of these categories according to the nested continua model. The point at the center of the graph represents absolute Firstness, the undifferentiated core of all possibility, quality, and feeling: the fount of creation. The space on the graph beyond the outermost circle represents absolute Thirdness, the eternal source of intelligibility that is not itself intelligible, judge of normative value that cannot itself be judged. Everything else represented on the graph represents Secondness, drawn as determinate markings/circles whose existence consists in being what they are in relation to the center, the space beyond the graph's outermost circle, any other circles or markings on the graph, and the spaces between the markings. Significantly, these markings/circles also exist in relation to persons *marking upon and perceiving the graph, as well as the graph itself*, a point to be developed further in discussions of the anti-foundationalist nature of this enterprise and Peter Ochs's understanding of what he calls "textual implicature."⁹

⁹ Chapter Three discusses textual implicature in terms of the logic of vagueness, specifically Ochs's claim that some texts display an irremediable vagueness that can only be specified by way of corresponding actions on the part of the person interpreting them, actions that the texts, as vague, can only imply. In terms of the nested continua model, I contend that visual forms—icons—may also exhibit such implicature in the same manner as texts, so long as the basic logical rules for

In its Secondness the graph represents the world we actually inhabit, in which entities differ from each other and are characterized by relative degrees of feeling and intelligibility. Though the visible markings of the graph are tinted with Firstness and Thirdness, these two categories are typically (though perhaps not always) experienced respectively as mediated and degenerate through existent objects, whose overriding character tends to remain that of Secondness and degenerate Thirdness.¹⁰ The relative distance of a marking/circle from the center of the circle reflects its hermeneutical rather than ontological priority.

The question of different types of existent relations bears on another area in which the three categories function in Peirce's thought: his taxonomy of the ways in which a sign signifies its object. A sign, which is simply something that stands for something else in some respect or capacity, may refer to its object in one of three ways. The first is to signify by qualitative resemblance, as when a portrait visually resembles its subject in color and form, or a map reproduces the relative locations of points within a given field of space. This type of signification Peirce called *iconic*. The second way a sign signifies an object is to signify by causal dependency, as when a column of smoke signifies the presence of a fire, or footprints in the snow signify a person who has trodden there; Arthur Conan Doyle's Sherlock Holmes stories provide many illuminating examples of inference based upon such signs.¹¹ This type

interpreting the graph are followed. Foundationalism, for its part, refers to the Kantian and post-Kantian project in philosophy of seeking to ground one's inquiries and truth-claims in some transcendental foundation.

¹⁰ The term "degenerate" is not intended as pejorative, but rather as a technical term that Peirce used in the sense of "related superficially" or "related without a sense of genuine purpose."

¹¹ In an entry in the journal *Semiotica*, "You Know my Method: A Juxtaposition of Charles S. Peirce and Sherlock Holmes" Thomas Sebeok and Jean Umiker-Sebeok catalogue the many similarities

of signification Peirce called *indexical*. The third means by which a sign may signify its object is through conventions agreed upon by those who participate in its use, as when a green piece of paper with George Washington's face on it signifies "one dollar," or when a rectangular cloth with thirteen strips of red and white and fifty stars against a blue background signifies "United States of America." This type of signification Peirce called *symbolic*. Iconic, indexical, and symbolic signification corresponds respectively with Firstness, Secondness, and Thirdness.

To be sure, the nested continua model trades in symbolic and indexical as well as iconic signification. For example, the model operates according to agreed-upon rules by which concentric circles refer to determinate entities in experience. This is symbolic signification. Likewise, the model presumes that markings/circles on the graph are drawn by some person possessed of some problem that needs sorting out. In their causally depending on this person (and his or her interpretative problems) for their existence, the markings/circles signify indexically. Yet the model's explanatory power is best understood in terms of its ability to signify iconically, an effort Peirce likewise explored after 1896 in his Existential Graphs. Understanding iconicity as the logic of qualitative resemblance, this is not to imply that the universe *physically* resembles a two-dimensional series of concentric circles converging upon an absolute center. Still less are the renderings on the graph intended as substitutes for the theological claims imputed to them. Not since the Pythagoreans of Samos have pure geometric forms served as objects of worship in

between Peirce's methods of logical inquiry and literature's most famous detective (*Semiotica*, 26, 3-4, 1979).

themselves, though concentric circles have continued to exert a considerable figurative power in religious culture, as the allegory of Dante's *Divine Comedy* suggests. As mentioned above, the model's concentric circles are intended as metaphorical, with metaphor understood as an effort to find some quality common to a pair of things and abstract this quality by such means—usually aesthetic, which also lies within the province of Firstness—as to confer understandings upon the pair which had hitherto remained undisclosed. In other words, the placement of markings/circles on the nested continua model is meant to display some quality also possessed by their corresponding real-life referents.

The relationship between time and history provides a helpful example of the model's iconic signification. Time and history is each a distinct continuous framework by which one understands the world, and as such the two are to be drawn as separate circles. Yet the category of history renders intelligible nothing that is not also intelligible according to time, and temporal continuity is implicit in any act of historical interpretation. Thus the circle denoting time is to be drawn around the circle denoting history. Moreover, just as one cannot consciously imagine time without doing so from some specific point in history, so might interpretations of time be seen to *pass through* the ring of history from the central point of absolute novelty—the location from which all change emanates—before bringing time into conscious awareness. The dynamics of the relation between time and history is to be discussed at length in Chapter Two (“Toward a Peircean Philosophy of History”), but for the moment what is important is that the aforementioned are insights bound up with the fact that the spatial arrangement of

circles on the model corresponds to qualitative differences between time and history as they actually exist.

There is one further point as to the qualitative relations between concentric circles as interpretive criteria, which is that, as continuous, a given circle contains no ultimate parts and may be specified in potentially infinite ways.¹² This understanding of a continuum as lacking in discrete ultimate parts bears on Peirce's metaphysics of *synechism*, which is the third feature of Peirce's thought that bears mentioning in introducing the logical dynamics of the nested continua model. Synechism, which Peirce introduced in a series of articles in *The Monist* between 1891 and 1893, is simply the philosophy of continuity, which in its metaphysical iteration is the view that anything in the world is ultimately continuous with respect to itself and that which it relates. Discontinuity does exist between existent things relative to certain interpretive frameworks, and often in the brute actuality of lived experience and the oppositions it presents. On the synechistic view, however, continuity is preeminent.

For the sake of understanding why Peirce's metaphysics of synechism informs nested continua as a model of theological interpretation, there are three relevant issues at hand. First, understanding entities as continuous helps to imagine how they are made intelligible to a given interpreter. As Michael Raposa has put it, a "fit" hypothesis will involve "true continuity," because that alone is the form in

¹² There is a kind of aesthetic satisfaction in knowing that no numeral can conceivably determine the precise circumference of a circle. In the infinite specifications of a circle as continuum, one may read the infinitely repeating decimals of π .

which anything can be understood.¹³ Second, a given continuum is understood on the graph as a circle, and as such, to surround that which it contains. In its conferring intelligibility, the continuum exists at a higher level of generality than what it explains, yet because it is continuous, it nonetheless remains open to inexhaustible potential specifications. In fact, the larger a circle is drawn on the graph, the *greater range* of specifications that might be imagined to emerge from it, a point to be developed further in discussing the logic of vagueness/generality and the mathematics of ordinal and cardinal number. For the moment, note that the number of possible actualizations of a continuum exceeds its existent actualizations, preventing the sort of rigid determinism often associated with metaphysical systems. Third, as a continuum is defined as that which has no *ultimate* parts, no part of a determinate continuum may be conflated with the ultimate. This is akin to saying that no circle on the graph may, in its Secondness, be mistaken for absolute Thirdness. This is theologically relevant in the sense that to understand that which is determinate as ultimate would be to commit idolatry.

These emphases on intelligibility, openness to possibility, and a lack of ultimate ontological status among continua speak to the fact that a metaphysics based on synechism helps avoid the foundationalism that modernist philosophy has typically associated with metaphysical inquiry. This is to say that, rather than understanding the modalities of being with respect to some foundation to which all interpretation must conform, synechism understands metaphysics insofar as it

¹³ Raposa, Michael. *Peirce's Philosophy of Religion*. Bloomington, Indiana: Indiana University Press, 1989, p. 42.

explains more determinate entities that would not otherwise have been explained. As Sandra B. Rosenthal has astutely observed, “to be derivative from emphatically does *not* mean to be less real or less ontologically ‘ultimate’ than, but rather to be understandable in light of, these other distinctions.”¹⁴ Neville draws a similar distinction between hypothetical and foundationalist versions of metaphysics in his work, *Normative Cultures*, in distinguishing between, respectively, non-reductive and reductive theories.¹⁵

To illustrate this distinction, let us imagine a conversation with some latter-day Thales, who claims that all the world’s forms are ultimately derived from some unifying substance such as water.¹⁶ This is akin to ontologically reducing all determinate beings to one foundation, such that interpretation of all things is to be guided by one rule: “something is real to the extent that it has the properties of water.” Should one respond that this rule offers no help in deciding what color socks to purchase at the department store, the reductionist philosopher can respond in one of two ways: (1) by denying the very existence of this choice, or (2) by introducing a *second* interpretive criterion, “something is irrelevant to the extent that it bears on buying socks at a department store,” which is tantamount to negating the claim that all interpretation refers to a single rule. As Ochs has convincingly observed, many of life’s problems are tragically exacerbated through

¹⁴ Rosenthal, Sandra B. *Speculative Pragmatism*. Amherst, MA: University of Massachusetts Press, 1986, p. 114.

¹⁵ Neville, *Normative Cultures*, p. vii.

¹⁶ Thales of Miletus (ca. 624 BC-546 BC) is considered the founder of Western philosophy. Arguably the first known person to explain natural phenomena without reference to myth, he sought to determine the fundamental first principle—which he believed to be water—as the substance upon which both nature and the place of the human within it rested.

their being referred to the wrong interpretive context.¹⁷ A non-reductive metaphysics allows one to remain open to interpretive pluralism and revision in light of countervailing evidence.

As a result of its association with foundationalism, metaphysics has often over the past century been characterized as, at best, so much nonsense, and, at worst, the basis for systems of marginalization and oppression. Though the excesses associated with metaphysical absolutism in history are well documented—including excesses carried out in the name of religion—thinkers who would deny metaphysical speculation outright are depriving analysis from the very thing that makes it possible, which is to say the ontological ground of existence. In doing so such thinkers are not only severing themselves from vital streams of inquiry and placing undue obstacles on the already difficult effort of interpreting a chaotic and confusing world, but often making implicitly metaphysical claims themselves. It is striking how often one encounters the fallacious logical move from “we cannot know X” to “X is not real,” a point to be examined at length with regard to recent philosophical challenges to historical objectivity. As Peirce himself put it, in distinguishing between “laboratory” and “seminary” philosophies:

Find a scientific man who proposes to get along without any metaphysics...and you have found one whose doctrines are thoroughly vitiated by the crude and uncriticized metaphysics with which they are packed.¹⁸

¹⁷ Ochs’s argument on errant interpretive contexts may be found in its most direct form in his article, “Response: Reflections on Binarism” (*Modern Theology* 24, 3, 2008), though many of his writings expound upon this theme.

¹⁸ *CP* 1.129

The nested continua model, despite its being “thoroughly packed” with synechism both in terms of its global sense of relations among continua and interpretation and its many non-trivial connections to theological speculation, understands metaphysical claims, insofar as they are to be rendered on the graph, to be “just” circles of intelligibility, albeit circles at a considerable remove from both the innermost circles that refer to the quotidian elements of human life or the intermediate circles of historically-situated cultures and history itself.¹⁹ As drawn around these smaller circles, metaphysics is understood both as responsible for addressing their existence and their norms, and as something that may only be posited *through* them, which is to say that one’s understanding of metaphysics, despite being posited as more general, inescapably arise within concrete situations of identity, history, and culture.

The particular name given to metaphysics as it informs the nested continua model is *triangulated metaphysics*. One need not read too much significance into the name, as “synechistic” or “hypothetical” likewise function as adequate modifiers for the type of metaphysics that characterizes this thesis. Yet “triangulated” is selected because the metaphor of the triangle bears on the way in which speculations of metaphysics may, even without certain foundations, nonetheless be understood as better or worse. As Peirce himself put it:

It is not, upon synechist principles, a question to be asked, whether the three angles of a triangle amount precisely to two right angles, but only whether

¹⁹ The most comprehensive discussion of the theological implications of synechism comes from Michael Raposa’s *Peirce’s Philosophy of Religion*, whose understanding of *theosemiotic* informs much of how this thesis conceives absolute Thirdness in relation to the markings/circles on the nested continua graph. Raposa’s work will be treated in Chapter Four (“Theological Implications”).

the sum is greater or less. So the synechist will not believe that some things are conscious and some unconscious, unless by consciousness be meant a certain grade of feeling. He will rather ask what are the circumstances which raise this grade...In short, synechism amounts to the principle that inexplicabilities are not to be considered as possible explanations; that whatever is supposed to be ultimate is supposed to be inexplicable; that continuity is the absence of ultimate parts in that which is divisible; and that the form under which alone anything can be understood is the form of generality, which is the same thing as continuity.²⁰

To the extent that one might understand the center of the nested continua graph as absolute Firstness and its exterior as absolute Thirdness (both of which are incognizable), the metaphor of the triangle sheds light on the way in which relations among continua exist between these unknowable poles. As one cannot determine the relative degrees of the angles of a triangle if only one angle is known, neither can one gain any meaningful understanding of absolute Firstness or Thirdness with respect to only one interpretive framework. Only by examining the relative degrees of *two or more* continua in reciprocal relation—which is to say that “lower-level” and “higher-level” hypotheses must answer to each other—can some partial degree of understanding of absolute Firstness or Thirdness be triangulated in relation. To be clear, the logical rules of nested continua are perfectly available to anyone who wishes to apply them, regardless of one’s metaphysical perspective. Yet understanding the model as an effort to critique, contextualize, and generate religious interpretations, *some* form of metaphysics is inescapable, as metaphysics is what places logical units into some overall relation. Defining theology as the discipline that draws from that which is determinate (whether Scriptural, historical, philosophical, scientific, or otherwise) to orient attention and action toward that

²⁰ CP 6.173.

which is ultimate, let us turn to the two primary theological resources for this project: Robert C. Neville and Peter Ochs.

Trajectories of Peircean Philosophical Theology

Graduating with a PhD from Yale in 1963, Neville (b. 1939) directed his early work toward a fusion of pragmatic philosophy and Whitehead's process cosmology into an innovative argument for creation *ex nihilo*, the notion that the world is created out of nothing. Neville's first book, 1968's *God the Creator*, was the outcome of this research. His subsequent work applied his philosophical theology to the question of freedom in creation (*Cosmology of Freedom*, 1974), the public nature of philosophy and theology (*Soldier, Sage, Saint*, 1978), the construction of his axiology of thinking, which holds that all thinking is valuing (*Reconstruction of Thinking*, 1981; *Recovery of the Measure*, 1989; *Normative Cultures*, 1995), the application of semiotics to theological ends (*The Truth in Broken Symbols*, 1996; *Symbols of Jesus*, 2001), and the robust defense of pragmatic and process thought as means of avoiding the pitfalls of modernism and its discontents (*The Highroad Around Modernism*, 1992; *Realism in Religion*, 2009). His public roles have included United Methodist pastor, Dean of the School of Theology and Professor in the Department of Philosophy at Boston University, as well as President of the Metaphysical Society of America in 1989, the American Academy of Religion in 1992, and the International Society for Chinese Philosophy in 1992. He has been the subject of two compilations of secondary commentary on his work, 1999's *Interpreting Neville* and 2004's *Theology in Global Context*.

Ochs (b. 1950), for his part, has drawn upon Peirce's ideas since he began publishing in the late 1970's. Also graduating from Yale, that university's John E. Smith was a formative influence on Ochs. Smith, who commented at length on the religious implications of the classic pragmatic texts of Peirce, John Dewey, and William James, influenced both Ochs's and Neville's respective careers.²¹ Richard J. Bernstein has been another key influence, through whom Ochs came to understand the need to formalize the method through which one gets inside the dialectic of Peirce's thought. A third, rather distinctive influence regarding the Peircean inheritance in Ochs, at least as relative to Neville's thought, is Rulon Wells, to whom Ochs attributes his tendency to express philosophy in terms of formal algebra and logic.²² Smith and Wells advised Ochs on his doctoral dissertation at Yale. Aside from his pragmatist context, Ochs stems from a tradition of nineteenth and twentieth-century rabbinic philosophy characterized by such figures as Hermann Cohen, Franz Rosenzweig, Martin Buber, and, more recently, Max Kadushin²³, as

²¹ John E. Smith (1921-2009) taught in Yale's philosophy department from 1952 to 1991, authoring such books as *Reason and God*, *The Spirit of American Philosophy* and *Purpose and Thought: The Meaning of Pragmatism*, among many others, and was the subject of a collection of essays, *The Recovery of Philosophy in America: Essays in Honor of John Edwin Smith*, which Neville edited along with Thomas P. Kasulis (Albany, NY: SUNY Press, 1997).

²² Rulon Wells (1918-2008), who taught in Yale's philosophy and linguistics departments from 1945 until 1989, is a model of mathematical and critical pragmatics; this is the family of logical analyses that generates and then critically evaluates diagrams, or formal descriptions, of the elements of pragmatic inquiry; among these are linguistic forms and expressions of everyday practices; semiotic forms and expressions of the logic of corrective inquiry; and ultimate criteria for evaluating this logic. (*Peirce, Pragmatism, and the Logic of Scripture*, p. 16).

²³ For Ochs, Franz Rosenzweig (1895-1980), more than any other thinker, advanced rabbinic philosophy in his efforts to correct the faults of modern philosophy and modern theology by a new thinking that focused on language in use. His analysis of the loss of orientation in modern thought prompted a return to traditional texts, but his analysis of them was informed by logical and sociological methods adapted from the university world of his day (Kepnes, Steven, Peter Ochs, and Robert Gibbs. *Reasoning After Revelation*. New York: Westview Press, 2000, p. 19). Kadushin (1895-

well as such Christian post-liberal theologians as Hans Frei and George Lindbeck, also at Yale.²⁴ In 1996, Ochs participated in founding the Society for Scriptural Reasoning. Scriptural Reasoning understands itself as a kind of “laboratory” within which Jews, Christians, and Muslims can come together and interpret each other’s sacred texts without imposing a single mode of interpretation, yet retaining the possibility for shared and mutually beneficial understandings.²⁵ Scriptural Reasoning has diverse roots within academic theology, yet presumably others among its practitioners—in Britain, these include Cambridge’s David Ford and Edinburgh’s Nicholas Adams—would agree that, considering the failure of modernist philosophers’ grand attempts to ground human knowledge on this or that *a priori* principle, the sources for guidance in vital matters lie in communal, historically situated traditions. Ochs’s most recent book is 2011’s *Another Reformation: Post-liberal Christianity and the Jews*.

The decision to draw upon Neville and Ochs regarding the theological aspects of nested continua has been made for several reasons. First, each thinker has found a means of applying Peircean logic and philosophy toward successful theological

1980), for his part, sought to identify rabbinic Judaism’s indigenous rules for reform, which Ochs sees as a point of entry toward a more developed “rabbinic semiotics” (*Peirce, Pragmatism, and the Logic of Scripture*, p. 300).

²⁴ Post-liberal theology came about in the early 1970’s at Yale in such works as Frei’s *The Eclipse of Biblical Narrative*, from 1974, and Lindbeck’s *The Nature of Doctrine*, from 1984, among others. Post-liberal theology may be characterized by the view that inquiry is informed by deep grammars among various faith traditions that are to be interrogated, as best one can, on their own terms, and which are inescapably historically-situated. As Nicholas Adams puts the matter, Frei and Lindbeck display the rule of pragmatism in a double way: serving particular communities’ habits of repair, and discerning those habits paradigmatically in scripture. (“Reparative Reasoning.” *Modern Theology*, 24, 3, p. 455).

²⁵ Adams, “Reparative Reasoning,” p. 450.

ends, yet the two have had little in common aside from their mutually having studied at Yale (not together) under John E. Smith. Where Neville argues on behalf of creation *ex nihilo*, Ochs speaks in terms of semiotic transformation by way of textual implicature. Where Neville weds his pragmatism to process thought, Ochs draws upon post-liberal efforts at uncovering the deep grammars of Scriptural traditions. Where Neville grandly speculates upon the metaphysical status of time and eternity and links his claims to theological concepts drawn from across the world, notably China, Ochs remains reticent, perhaps even suspicious of efforts to extend his claims beyond their hermeneutic home in Abrahamic Scriptural exegesis. Where Neville inveighs against postmodern philosophy as among the detritus of the philosophical legacy of Kant, Ochs wears the self-description “postmodern” consciously, albeit ironically.²⁶ In light of these divergences, the two thinkers might be said to constitute the most widely divergent contemporary figures that nonetheless fit among the trajectories of Peircean philosophical theology.

At the same time, Neville and Ochs are not so incompatible that a model of theological interpretation drawn from Peirce, their mutual source, could not hope to reconcile them in some sense, and indeed, this project sets as its goal the achievement of an analytical unity to their work. Each thinker belongs within the scholarly community on Peirce and religion, an intellectual circle that is more narrowly drawn, for instance, than that of the community of Peirce scholars (many

²⁶ One of the few points of direct engagement between Neville’s and Ochs’s careers came in 1993, when David Ray Griffin was looking for contributors to his series on what he calls ‘constructive postmodernism’ (*Founders of Constructive Postmodern Philosophy: Peirce, James, Bergson, Whitehead, and Hartshorne*. Albany: SUNY Press, 1993). Having asked Neville, who declined, he then solicited Ochs, who went on to publish the volume’s article on Peirce.

of whom will nonetheless be cited in this thesis). For thinkers within this family, among which may be included Robert S. Corrington, Michael Raposa, Leon J. Niemoczynski, Anette Ejsing, and Andrew Robinson, such terms as “theosemiotic,” “axiology of thinking,” “ecstatic naturalism,” and “Scriptural Reasoning” may be added to the broader Peircean lexicon of “interpretant,” “abduction,” “Thirdness,” etc. With respect to Peirce scholars, such terms are commonly intelligible to the extent that applying the nested continua model toward the concepts such terms represent does not strain the model’s plausibility. Moreover, as each person just mentioned, Neville and Ochs especially, has contributed valuable insights to this project, the hope of devising an analytical framework to both bring their thoughts to bear and comment upon their being part of a trajectory within history is a satisfying prospect.

This is to say that Neville’s and Ochs’s writings are not merely raised within this thesis as some kind of testing ground for a model that, aside from its also having been influenced by Peirce, owes nothing to their work. With respect to explication of Peircean logic and metaphysics, Neville and Ochs have each offered much to this model; with respect to its theological insights, they have provided no less than its basic parameters. Following Neville, the model holds that God created the universe *ex nihilo*, that time, eternity, and norms can and should be discussed together in theology, and that every passing moment witnesses the creation of novelty that is bestowed with a normative value that it may or may not reach. Following Ochs, the model holds that our interpretations, despite being objectively linked to time and eternity, are inescapably filtered through historical and linguistic communities, the

norms of which inform our habits, and that the solutions to the problems we face must respect those habits.

To interpret the work of Neville and Ochs according to a mutual framework not only serves as a testament to the versatility of each thinker's respective project; it also presents an opportunity to bring together two theological communities who up until now have had little to say to one another. To Scriptural reasoners, the model aims to illustrate the way in which the interpretive problems we experience within our lives and historical communities might be opened up to an elevating and expanded participation in abstract metaphysical structures of time and eternity that reach out to those of us who are not at home in Scripture while *yet exercising the same type of non-reductive triadic logic* that informs their practices. At the same time, nested continua offers a specific logical program, that of critically analyzing errant binaries with respect to appropriate and inappropriate rules of reasoning, as a means of opening new pathways for metaphysical speculations to answer to real problems and prevent nested continua from slipping into an inadvertent navel-gazing that counts the number of angels dancing on the head of a pin while those around us suffer.

There is a sense, then, in which this project applies Neville's methods (a speculative metaphysics of time, eternity, and normative value) to Ochs's ends (a reparative reasoning with regard to errant logical binaries), and vice versa. At the same time, there is also a sense in which each thinker might hesitate to embrace the nested continua model. As Ochs has put it:

Like the rabbinic interpreter of scripture, the pragmatic reader is not in the business of constructing possible models, but only of offering corrective

readings of existing claims, read as texts; the readings are guided by interpretive principles that are shared by some community of interpreters for whom these texts offer significant, but somehow confused instructions about how to conduct some practice.²⁷

Neville, although more similar in spirit to such an undertaking than Ochs, likewise finds in logic (or rather, mathematics) too rarefied as an atmosphere for which to sustain a speculative philosophy of religion:

No language with a level of abstraction required to transcend all historical conditioning, such as mathematics, has the richness to express theologically interesting ideas. Therefore, the best that can be done is to generalize from some rich tradition and attempt to control for the biases introduced.²⁸

Neville's point is in fact quite congenial to the idea of nested continua, as the model will likewise understand philosophical theology to respect traditions as necessary bases for its inquiries. Yet the possibility of expanding upon iconic logic as displayed by way of a visual graph of concentric circles, even one as enriched through metaphor as nested continua intends to be, finds little home among Neville's many writings.²⁹ An even greater challenge with respect to Neville and nested continua lies in Neville's preference for an understanding of time based in the metaphysics of Alfred North Whitehead rather than Peirce, a point to be discussed at length in Chapter Three ("Trajectories: Neville and Ochs").³⁰

²⁷ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 7.

²⁸ Neville, Robert C. *A Theology Primer*. Albany, NY: SUNY Press, 1991, p. 3.

²⁹ With regard to the mathematical or logical dimensions of nested continua, it is their very aridity, rather than their richness, that makes them so vital as instruments of theological analysis, for such aridity prevents anyone from misaking the bare renderings of the graph for objects of love and devotion themselves.

³⁰ Alfred North Whitehead (1861-1947) was an English philosopher who co-authored (with Bertrand Russell) the *Principia Mathematica* while at Cambridge and went on to teach at Harvard. Although his original work lay in mathematics, he is best known as the founder of process philosophy, the school of speculative metaphysics that identifies reality with change and dynamism. With regard to Neville's application of Whitehead's metaphysics in his understanding of time and

In spite of the thinkers' differences with respect to one another and to this project, there are two overlooked affinities between their writings that point toward bringing their insights into harmony. The first is that of Neville's "axiology of thinking," which argues that the nature of thinking is valuing and that truth is the carryover of value from object to interpreter. Axiology of thinking, predicated as it is upon debunking the distinction between fact and value, resonates with Ochs's own work with regard to the continuity between diagrammatic and corrective reasoning. For if thinking is valuing, and diagramming correcting, then a thesis such as this one, which understands thinking in terms of diagramming and (in part) valuing in terms of correcting, has a promising overlap to build upon. The second affinity lies in Neville's and Ochs's respective applications of Peirce's logic of vagueness. Each thinker makes considerable use of vagueness, and though Neville's sense of vagueness lies in the relation between overarching philosophical terms and specification through lived religious traditions around the world, and Ochs's in the relation between reader and text, this thesis will argue that the difference between the two is to be found primarily in terms of the levels of generality at which vagueness is seen to reside.

An important aspect of reconciling Neville and Ochs is through the development of a Peircean metaphysics of history. Since Neville makes a convincing case as to the intimate link between time and eternity, and Ochs an equally convincing case as to the link between historically situated communities and

eternity, an instructive source is Sandra B. Rosenthal's chapter in *Interpreting Neville*, "Neville and Pragmatism: Toward Ongoing Dialogue" (Ed. Chapman, J. Harley and Nancy K. Frankenberry. Albany, NY: SUNY Press, 1999).

solutions to everyday problems, this project must show how time and history are themselves related, or rather, how “history” is the category by which eternity, through time, is encountered by the communities with which Ochs is dealing. With the intention of rendering their respective projects at different levels of the same graph, this thesis will build upon Neville’s and Ochs’s affinities in axiology and vagueness to posit what in mathematical terms would be called a “simple sparse sequence” and in terms of nested continua is a specific series of concentric circles labeled “time,” “history,” “faith tradition,” and “participant in faith tradition.” Without denying Neville’s aims to bring theology into daily life (and in fact, referring to them often), the model will place his metaphysical arguments for eternity at the outermost circle on the graph. Likewise, the model will locate Ochs’s Scriptural Reasoning as a hermeneutics of interfaith dialogue at the levels of “faith tradition” and “participant in faith tradition.” This is emphatically not intended to reduce their work to these levels alone, but merely an effort to establish the compatibility for certain aspects of their projects in the hopes of bringing together both their respective insights and their theological and academic communities. More broadly, the nested continua model applies tools derived from Peirce’s writings on synechism to show how history provides resources to solve problems within religious communities, as well as how religious communities themselves interact within historical and temporal fields.

Before discussing the structure of the work, it is helpful to make note of its procedures of citation with regard to Peirce’s primary texts. Despite over three decades of diligence, as well as a superior arrangement of its texts, on the part of the

Peirce Edition Project in compiling the *Writings of Charles S. Peirce, A Chronological Edition*, the original *Collected Papers of Charles Sander Peirce* remains the most comprehensive resource currently available with regard to the late-period (post 1892) texts from which the present study draws. As such, the *Collected Papers* will provide the bulk of the primary citations in the coming chapters. The *Chronological Edition* will be cited in regard to Chapter One's tracing of philosophical influences in Peirce's earlier career, and some of Peirce's texts remain only available in manuscript form. For these manuscripts, citations will come from Richard Robin's *Manuscripts in the Houghton Library of Harvard University* (cited as "MS").³¹ In the rare instances of citing another compilation, the following citations will be given, followed by the customary abbreviations:

- CP *Collected Papers of Charles Sanders Peirce*, vols. 1–6, 1931–1935, Charles Hartshorne and Paul Weiss, eds., vols. 7-8, 1958, Arthur W. Burks, ed., Harvard University Press, Cambridge, MA.
- W *Writings of Charles S. Peirce, A Chronological Edition*, Peirce Edition Project (eds.), Indiana University Press, Bloomington and Indianapolis, IN, 1982–.
- CN *Charles Sanders Peirce: Contributions to The Nation*, 4 volumes, Kenneth Laine Ketner and James Edward Cook, eds., Texas Technological University Press, Lubbock, TX, 1975–1987.
- NEM *The New Elements of Mathematics by Charles S. Peirce*, 4 volumes in 5, Carolyn Eisele, ed., Mouton Publishers, The Hague, Netherlands, 1976.
- HP *Historical Perspectives on Peirce's Logic of Science: A History of Science*, 2 vols., Carolyn Eisele, ed., Mouton De Gruyter, Berlin, New York, Amsterdam, 1985.

³¹ *Manuscripts in the Houghton Library of Harvard University*, as identified by Richard Robin, *Annotated Catalogue of the Papers of Charles S. Peirce*. Amherst: University of Massachusetts Press, 1967.

SS *Semiotic and Significs: The Correspondence between C. S. Peirce and Victoria Lady Welby*, edited by Charles S. Hardwick with the assistance of James Cook, Indiana University Press, Bloomington and Indianapolis, IN, 1977.

EP *The Essential Peirce, Selected Philosophical Writings, Volume 1 (1867–1893)*, Nathan Houser and Christian J. W. Kloesel, eds., Indiana University Press, Bloomington and Indianapolis, IN, 1992.

The Essential Peirce, Selected Philosophical Writings, Volume 2 (1893–1913), Peirce Edition Project, eds, Indiana University Press, Bloomington and Indianapolis, IN, 1998.

Chapter structure

This project takes shape by way of four chapters. Chapter One, “Nested Continua in Context,” aims to identify and examine those areas of Peirce’s thought that most inform the nested continua model. The chapter begins with Peirce’s prevailing influences, discussed as a means of providing greater context in relation to the currents of nineteenth-century thought rather than as an exhaustive study. Influences to be examined include German idealism (Kant, Hegel, Schelling), classical and scholastic philosophy (Aristotle, Plato, Duns Scotus), mathematical and empirical logic (Boole), and American influences (Benjamin Peirce, F.E. Abbot, James). The chapter will then turn to the successive areas of Peirce’s work that most inform the nested continua model. The first of these are the Existential Graphs, whose demonstrations of iconic logic provide the model with its basic self-understanding, yet whose rules of logical operation are very different. Examining the Graphs’ rules will establish how the model is to be used, which will be seen to draw as well from Peirce’s understandings of ordinal and cardinal numbers. After the Graphs, the most important area of Peirce’s philosophy to be examined are the categories of Firstness, Secondness, and Thirdness, which will be treated

developmentally with respect to some of their most significant modifications over the course of Peirce's life, as well as the indispensable function they perform in terms of interpreting the metaphysical implications of the model, particularly in relation to synechism. Considerable technical detail will also be required to show how the model understands its markings/circles as "degenerate" Thirdness, "mediate" Firstness, and Secondness between "absolute" Firstness and Thirdness. Following this, such innovations in Peirce's work as his logic of abduction, precision, and vagueness/generalality will be understood in terms of nested continua's logical and hermeneutic operations. Similar treatment will be given for Peirce's writings on habit, continua, and infinitesimals, drawing primarily from Peirce's *Monist* series of 1891-93. Commentaries will be given as to how each of these areas figured into some of the broader currents of Peirce's life and career, as well as suggestions for further readings. The chapter's final section will introduce the logical and metaphysical guidelines for understanding the nested continua model.

Chapter Two, "Toward a Peircean Historiography," aims to apply Peirce's philosophy toward history as its own horizon for metaphysical speculation. The chapter begins by identifying an errant logical binary among contemporary debates over the discipline of historiography, as well as epistemological status of history with respect to its relationship with time. The analysis here is by turns critical and constructive. The critical turn, derived from Peter Ochs's textual reasoning, will identify errant logical binaries among some of the debate's leading arguments and undertake historical inquiry to uncover antecedent causes. In this case, the chapter

will identify—in the work of Hayden White, R.G. Collingwood, late nineteenth-century German historicism, and ultimately Kant—the roots of this particular binary. Following this, the constructive turn will explore some of the nested continua model’s possibilities for philosophies of historiography and history. This entails examining certain methodological considerations on the status within historiography of evidence, explanation, and counter-factual arguments. It also entails examining Peirce’s own writings on history, as well as some of the secondary literature on the subject. In its final section, this chapter will discuss the relationship between history and time as nested continua.

Chapter Three, “Trajectories: Robert C. Neville and Peter Ochs,” aims to analyze the work of Peter Ochs and Robert C. Neville as contemporary manifestations of Peircean philosophical theology. This is undertaken toward understanding Neville’s axiology of thinking and Ochs’s pragmatic historiography as mutually assignable according to nested continua. As such, this chapter is subdivided into sections dealing separately with Neville and Ochs, though its introduction does establish certain comparisons between each thinker’s career and intellectual contexts, such as the respective ways each thinker applies the notion of vagueness and argues against the fact/value distinction. Regarding Ochs’s work, the chapter aims to critique and contextualize his notion of pragmatic historiography by showing how it has difficulties accounting for historical understandings across different traditions and cultures, and that it would benefit from the broader speculative framework that synechism offers. Regarding Neville’s work, this section of the chapter will aim to show how Neville’s metaphysics of time and eternity may

be applied to nested continua at its outer levels, as well as its context in relation to Whitehead's metaphysics. This section of the chapter will examine Sandra B. Rosenthal's description of Neville's work as process-oriented at the expense of his pragmatism before arguing that Neville nonetheless offers a theological vision that is congenial to the "emergent-continuity-within" implications of Peirce's synechism.

Chapter Four, "Theological Implications," aims to explore the theological speculations warranted by the nested continua model. It will begin with a brief analysis of Peirce's own writings on religion, particularly his *Monist* series of 1891 through 1893 and his "Neglected Argument for the Reality of God," from 1908. Following this, it will discuss some of the most important figures in terms of the religious dimension of Peirce's thought, particularly Michael Raposa and Robert Corrington. In the chapter's longest section, some of the theological implications of the nested continua model will be discussed, including the caveats that come with applying Peirce's three categories theologically—particularly the sense in which deduction is an inappropriate means of speculating upon such traditional divine attributes as freedom and supremacy—as well as the different modes of experiencing and discussing the divine. These include understanding God in terms of absolute Thirdness as immanent source of intelligibility and ultimate judgment, absolute Firstness as creator *ex nihilo* and source of chance and novelty, as well as love, change, and normativity as some of the means by which the divine is experienced in daily life. Analysis will then turn toward the problem of evil, distinguishing between "accidental" and "singular" evil, as well as the distinction between "opaque" and "translucent" circles of interpretation. The chapter will then

address the problem of supersessionism as a hypothesized example of singular evil, investigating the origins of its historical trajectories with regard to early Christian and Jewish communities, as well as aspects of the text of the Gospel of John. The thesis will conclude by discussing suggestions for further research.

Chapter one: Nested Continua in Context

Now the clue...consists in making our thought diagrammatic...by treating generality from the point of view of geometrical continuity, and by experimenting upon the diagram. We see the original generality like the ovum of the universe segmentated by [a] mark. However, the mark...may be erased. It will not interfere with another mark drawn in quite another way...But no further progress beyond this can be made, until a mark will stay for a little while; that is, until some beginning of a habit has been established by virtue of which [it] acquires some incipient staying quality, some tendency toward consistency.

Charles Sanders Peirce, "The Logic of the Universe" 1898³²

The aim of this chapter is twofold: to identify those aspects of Peirce's life and writings that most inform the nested continua model, and to establish certain guidelines by which the model may be used. The chapter unfolds across three sections. The first section, "Peirce in context," discusses some of the streams of thought that influenced Peirce's life and philosophy, of which four overarching areas will be treated: German idealist philosophy (specifically Kant, Hegel, and Schelling), classical and scholastic philosophy (specifically Plato, Aristotle, and Duns Scotus), empiricist logic, philosophy, and mathematics, and such American influences as Peirce's father, Benjamin Peirce, his first wife, Melusina ("Zina") Fay, and his

³² CP 6.204.

relationships with colleagues such as William James and Francis Ellingwood Abbot. In tracing these influences on Peirce's career, the hope is to gain some sense of where his work fits within the broader currents of the nineteenth century, as well as its contemporary reception. Although the arrangement of influences will follow a loose chronology, the organization is thematic rather than developmental.³³

The second and third sections of the chapter aim to connect Peirce's thought to the nested continua model. Section two, "nested continua in context," identifies and explicates select aspects of Peirce's thought specifically in their bearing on nested continua. This is done to highlight the breadth of Peirce's intellectual achievements, but more than this the aim is to clarify how those achievements may assist in what the present project is trying to do. There are seven primary areas of relevance from Peirce's work: Existential Graphs, the categories, logic of abduction, distinction between vagueness and generality, ordinal and cardinal number, precision and habit, and continua and infinitesimals. An eighth feature, emergence, will also be introduced with reference to the writings of Sandra B. Rosenthal and Philip Clayton. Emergence is a feature that Peirce's primary texts only imply, but it

³³ Several excellent developmental accounts of Peirce's philosophy are available. The most widely acclaimed of these is arguably Murray Murphey's *The Development of Peirce's Philosophy* (Cambridge, MA: Harvard University Press, 1961), which attributes the evolution of Peirce's ideas to innovations in logic over the course of his career. Other instructive works both precede and follow Murphey's effort—for the former, see W.B. Gallie's *Peirce and Pragmatism* (Harmondsworth: Penguin Books, 1952) and Thomas Goudge's *The Thought of C.S. Peirce* (New York: Dover, 1951); for the latter, see Douglas Anderson's *Strands of System* (West Lafayette, IN: Purdue University Press, 1995). Recent commentaries have also uncovered insights in more specific areas, from semiotics (T.L. Short's *Peirce's Theory of Signs*. Cambridge: Cambridge University Press, 2007) to the metaphysics of continuity—see Joseph Esposito's *Evolutionary Metaphysics* (Athens, OH: Ohio University Press, 1980) and Carl Hausman's *Charles S. Peirce's Evolutionary Philosophy* (Cambridge: Cambridge University Press, 1997). Along with Sandra B. Rosenthal's *Speculative Pragmatism* (Amherst: University of Massachusetts Press, 1986), Hausman's work in particular, while not strictly a developmental account, is among the most insightful treatments of the role that infinitesimals and continua play in Peirce's philosophy.

fits among them quite congenially and opens onto crucial questions regarding the nature of process. Section three, “rules for the nested continua model,” introduces the basic rules by which the model operates, moving broadly along a spectrum from more straightforward logical and corrective guidelines toward some of the speculative material that will be discussed further in Chapter Four (“Theological Implications”).

Peirce in context

A brief intellectual biography of Peirce might look something like the following. Born in 1839 in Cambridge, Massachusetts, Peirce was raised among an intellectual elite. Owing to the prominent position of his father, Benjamin Peirce, as a mathematics professor at Harvard, young Charles was raised among such leading figures of mid-nineteenth-century Boston as Ralph Waldo Emerson, Louis Agassiz, and Oliver Wendell Holmes, Sr. From a very young age, Peirce displayed a preternatural gift for logic, as well as a keen awareness of his own intellectual abilities. Encountering Kant’s *Critique of Pure Reason* in 1855, Peirce devoted enormous energies toward mastering its principles and, in the wake of Kant’s critique, retaining some means of understanding the mind’s ability to know the world as it really is.³⁴ These efforts, along with an omnivorous intellect more generally, led him in the 1860’s to study classical and scholastic philosophy, through which he came to understand the history of philosophy in terms of realism versus

³⁴ Louis Menand has argued that Peirce’s faith in the mind’s ability to know the world stemmed from his father’s insistence that “the two are wonderfully matched” (*The Metaphysical Club*. New York: Farrar, Straus, and Giroux, 2001, p. 52).

nominalism (he was a staunch realist).³⁵ From these readings Peirce introduced the basic form for his semiotics in 1867's "On a New List of Categories" and mounted a scathing critique of the legacy of René Descartes in contemporary thought, though his discovery of an algebra for the logic of relations around 1870 caused him to move away from the scholastic understanding of entities as essences and toward an understanding of entities as habits of behavior. This new understanding coincided with a series of meetings in Cambridge with William James, Oliver Wendell Holmes, Jr., and others that Peirce would later refer to as "The Metaphysical Club," which would give rise to his writings in the late 1870's that are now seen as the foundational texts of pragmatism. After a period of research and instruction at Johns Hopkins University from 1879 to 1884, during which Peirce focused his efforts primarily on mathematics and laboratory science, his life was rocked by a series of personal and professional disasters—the end of his first marriage, his dismissal from Johns Hopkins, and his eventual departure from the United States Coast Survey, which had provided him with regular income for many years—from which he would never fully recover. From this point until his death in 1914, Peirce's writings became more grandly speculative as he expanded his ideas into overtly metaphysical and theological areas, while spending much of his time either at failed efforts to rehabilitate his career or in rural seclusion with his second wife on their estate in Milford, Pennsylvania.

³⁵ In philosophy, *realism* is the position that objects (specifically, general objects) exist independently of what any one person or group of persons conceives them to be, whereas *nominalism* holds that only particular objects exist, and general terms are just names.

Kant

Honing in more closely on this list of influences, Immanuel Kant is the figure that bears mentioning first.³⁶ Aside from perhaps Richard Whately's *Elements of Logic* (Peirce's first encounter with formal logic), Kant's *Critique of Pure Reason* was the defining text for Peirce's early career, and Peirce cited Kant across his life more than any other thinker. Looking back in later years, Peirce himself was to recall:

In the early sixties I was a passionate devotee of Kant, at least as regards the Transcendental Analytic in the *Critique of Pure Reason*. I believed more implicitly in the two tables of the Functions of Judgment and the Categories than if they had been brought down from Sinai.³⁷

The influence of Kant upon Peirce's thought manifested itself in two overarching areas: (1) its insistence on the primacy of logic as a means of philosophical insight; (2) its confidence that philosophy can be constructed as a system in which all forms of human knowledge may be delineated according to categories, an approach known as the architectonic (in his insistence on categories, Peirce at times went beyond Kant). As Murray Murphey has convincingly argued, Peirce's logical innovations—his preference for syllogistic instead of propositional logic, innovations in the logic of relations, and explorations in the mathematics of continuity as well as ordinal and cardinal number—all pushed Peirce away from his early adherence to Kant.³⁸ Yet the terms in which Peirce presented his work, which is to say as an architectonic effort to explore the conditions of human knowledge, remained consistent at least

³⁶ Immanuel Kant (1724-1804) is arguably the most influential Western philosopher of the past two centuries. In his book, *The Highroad Around Modernism*, Neville holds Kant responsible for many of the pitfalls of both modernist and postmodernist philosophy, while Ochs's *Peirce, Pragmatism, and the Logic of Scripture* lays many of Peirce's deepest philosophical problems (which Ochs calls "conceptualism") up until 1903 at Kant's feet.

³⁷ CP 4.2.

³⁸ Murphey, *The Development of Peirce's Philosophy*, p. 3.

until Peirce's articulation of pragmatism after about 1905, and in many ways up until his death.

Put simply, the philosophical edifice Kant had constructed was so intricate, so penetrating, and so seemingly elegant in its logic that it is little wonder that the young Peirce should have been drawn to it. Kant aimed to determine the transcendental conditions for human knowledge, cleaving inquiry into that which can be known with certainty (in the manner of Newton's laws of physics) and that which belongs to faith (a reflection of the Lutheran pietism of eighteenth-century Königsberg).³⁹ In his assertion of the "transcendental unity of apperception," which may be thought of as the unity of self-conscious experience, Kant had argued that knowledge is made possible by transcendental conditions of time, space, and other categories whose truth is to be deduced *a priori*, and that what is really known are one's judgments of the world by way of representations.⁴⁰ Thus conceived, representation for Kant was impossible to either categorize or reduce, which allowed it to perform two functions in his philosophy: (1) as representation of a concept, (2) as transcendental condition or "ground" of representation.⁴¹ In light of his dichotomy between representations and things-in-themselves, Kant carved out a privileged place for philosophy as a transcendental project whose job was to

³⁹ This is by no means to say that Kant did not attend to morality in his philosophy. The matter is simply that speculation upon such metaphysical questions as the nature of God's reality were seen by Kant to be beyond human ken.

⁴⁰ Scruton, Roger. *Kant*. Oxford: Oxford University Press, 1982, p. 32.

⁴¹ Allison, Henry E. *Kant's Transcendental Idealism*. New Haven: Yale University Press, 2004, p. 17.

describe and represent the nature and conditions of representation. For traditional—“dogmatic”—metaphysics, however, it was a damning turn.

Aside from his architectonic ambitions and taste for philosophy by way of logic, Peirce took many lessons from his readings of Kant. For instance, reading through 1867’s “On a New List of Categories,” one encounters the terms “being” and “substance” bookended around Peirce’s three categories of Firstness, Secondness, and Thirdness. While Kant did not invent these terms (their philosophical origins stem from Aristotle), the fact that Peirce in this text introduced his categories as transcendental conditions that bring the manifold of experience to unity betrays a considerable Kantian influence. As Peirce put it in the first paragraph of the text:

The function of conceptions is to reduce the manifold of sensuous impressions to unity and the validity of a conception consists in the impossibility of reducing the content of consciousness to unity without the introduction of it.⁴²

The Kantian inheritance in Peirce’s early writings on semiotics was also on display in his insistence that each cognition involves an inference of some subsequent sign.⁴³ In the introduction to his transcendental analytic, Kant had written that “the cognition of every human understanding is a cognition through concepts, not intuitive but discursive.”⁴⁴ This discursive turn, which Robert Brandom has argued marked the origins of pragmatism,⁴⁵ would be revised in Peirce’s writings as he adopted the realism of Duns Scotus, and Peirce’s semiotics eventually moved away

⁴² *CP* 1.545.

⁴³ *W* 2, p. 172-3

⁴⁴ Kant, Immanuel, trans. Paul Guyer and Allen W. Wood. *Critique of Pure Reason*. Cambridge: Cambridge University Press, 1998, p. 205.

⁴⁵ Brandom, Robert. *Perspectives on Pragmatism: Classical, Recent, and Contemporary*. Cambridge, MA: Harvard University Press, 2011, p. 1.

from his stringent claims on inferential cognition. Yet some element of discursiveness in thought would remain a central part of Peirce's philosophy throughout his life, as would his tendency to articulate his metaphysics as a regulative principle of logic, which stems from Kant's *Critique's* regulative/constitutive logical distinction.⁴⁶

For all of Peirce's debts to Kant, there were also significant departures. In an immediate biographical sense, Peirce came to feel around 1866 that the subject-object structure of logical propositions—Kant's primary logical unit—was limiting, and that Kant's transcendental categories were somewhat arbitrary.⁴⁷ More significant, however, considering the enduring legacy of Kant in the Western philosophical tradition, was the way Peirce sought to push past Kant's critique of pure reason and retain the possibility of the human mind's objectively knowing a world that is external to it. As Peirce would put it in 1902:

According to Kant, the central question of philosophy is "How are synthetical judgments *a priori* possible?" But antecedently to this comes the question of how synthetical judgments in general, and still more generally, how synthetical reasoning is possible at all.⁴⁸

Peirce came to hold that the answer lay in the logic of hypothesis, which he called *abduction*. Arguing that abduction represents a third syllogistic form alongside

⁴⁶ CP 5.1. Regulative logic is to be distinguished from constitutive logic (*Critique of Pure Reason*, p. 179). On the constitutive side, representation is actively constituted or constructed by the functioning of the human mind, whereas regulative logic operates on the assumption that some objective reality exists independently of our conceiving it.

⁴⁷ Murphey, *The Development of Peirce's Philosophy*, p. 56.

⁴⁸ CP 5.348. As to the synthetic/analytic distinction in logic, analytic judgments are true by virtue of the definitions contained in the premise, and are in a sense self-contained (e.g. "two plus two equals four"), whereas synthetic judgments are true by virtue of how their meaning relates to the world.

induction and deduction,⁴⁹ Peirce understood inquiry less as a transcendental project predicated by way of *a priori* principles than as a speculative endeavor validated to the extent of its capacity to explain some set of facts. Karl-Otto Apel puts the matter well as follows:

Hypothesis and experience are no longer mutually exclusive for Peirce, who instead replaces the Kantian alternative of synthetic a priori propositions and synthetic a posteriori propositions with the fruitful cycle of the correlative presuppositions of hypothesis (abductive inference) and experimental confirmation (inductive inferential procedure).⁵⁰

Peirce argued that Kant's dualistic approach to ontology, even if it were tenable according to the criteria set by his own critical philosophy, could not provide the basis for a philosophy of human history and culture as a product of responsible actions.⁵¹

Significantly, Peirce extended his abductive response to Kant not merely into empirical inquiry, but into metaphysics, as well, as he explained in a remarkable passage from a lecture in 1903. Summing up what he called the three "moments" of Kant's first *Critique*, he argued that the first two moments have been well understood, which are: (1) knowledge is relative to human experience and to the nature of the human mind; and: (2) as soon as it has been shown that a conception is essentially involved in the forms of logic, there can no longer be any rational hesitation about fully accepting that conception as valid for the universe of our

⁴⁹ CP 5.171.

⁵⁰ Apel, Karl-Otto. *Charles S. Peirce: From Pragmatism to Pragmaticism*. Amherst: University of Massachusetts Press, 1981, p. 36.

⁵¹ Apel, Karl-Otto. "Transcendental Semiotics and Hypothetical Metaphysics of Evolution: A Peircean or Quasi-Peircean Answer to a Recurrent Problem of Post-Kantian Philosophy." *Peirce and Contemporary Thought*, ed. Kenneth L. Ketner. New York: Fordham University Press, 1995, p. 369.

possible experience.⁵² Peirce's discussion of Kant's third "moment" bears quoting at length:

This third moment consists in the flat denial that the metaphysical conceptions do not apply to things in themselves. Kant *never* said that. What he said is that these conceptions do not apply beyond the limits of possible experience. But we have *direct experience of things in themselves*. Nothing can be more completely false than that we can experience only our own ideas. That is indeed without exaggeration the very epitome of all falsity. Our knowledge of things in themselves is entirely relative, it is true; but all experience and all knowledge is knowledge of that which is, independently of being represented. Even lies invariably contain this much truth, that they represent themselves to be referring to something whose mode of being is independent of its being represented.⁵³

The upshot of this passage, which is that one only knows what one can experience, but that one nonetheless has experience of things in themselves, requires further investigation into the meanings of the terms "experience" and "things in themselves," and will become better understood after further discussion of Peirce's understandings of the categories and his logic of abduction. Yet it is clear that Peirce's emphatic defense of realism plainly asserts philosophy not as an endeavor to ascertain *a priori* transcendental conditions for *certain* knowledge, but as an ongoing process of inquiry into a real world to which all human claims, metaphysical or otherwise, must answer.

Hegel and Schelling

W.W.F. Hegel and F.W.J. Schelling, though common to the German idealist tradition of philosophy, were divergent figures within that tradition, and these differences manifested themselves accordingly in Peirce's work. While Hegel aimed

⁵² CP 6.95.

⁵³ Ibid.

to elevate the world—particularly by way of history—into an absolute rational system, Schelling rejected system—at the expense of consistency in his own writings—in favor of an effort to capture the inalienable paradoxes of nature.⁵⁴ To put their respective influences on Peirce in terms of Peirce’s own categories, Hegel’s philosophy resonates with Thirdness, emphasizing reason, intelligibility, and teleology across history, whereas Schelling’s philosophy resonates with Firstness, emphasizing chance, feeling, and aesthetics. Though neither figure was cited in Peirce’s writings to anything near Kant’s extent (there was also no “Hegel-Schelling phase” in his career as there was with Kant), Hegel and Schelling bear mentioning, not only because of their affinities with certain aspects of Peirce’s work, but also because of their role within the secondary literature on Peirce and religion. In his work *Charles Sanders Peirce and a Religious Metaphysics of Nature*, Leon J. Niemoczynski observes a distinction between a “Schellingian speculative cosmology” and a “Hegelian historical-rational account” in writings on Peirce and religion, assigning a polarity between these alternatives and arguing on behalf of readings that favor Schelling.⁵⁵ This thesis does not ascribe such a polarity to the collection of Peirce scholars who comment on religious matters, though it does acknowledge Robert Corrington’s reading of Schelling as a significant element of Corrington’s *ecstatic naturalism*, which represents one of the major applications of

⁵⁴ Georg Wilhelm Friedrich Hegel (1770-1831) and Friedrich Wilhelm Joseph Schelling (1775-1854) were major figures in the German idealist philosophical tradition, which, following Kant, sought to explore what the world must be like in order for us to know it, yet reacted against Kant’s stringent epistemology in its constructing of grand historical or cosmological systems. Hegel and Schelling were longtime friends, yet fell out over personal and philosophical disagreements.

⁵⁵ Niemoczynski, Leon J. *Charles Sanders Peirce and a Religious Metaphysics of Nature*. Lanham, MD: Bowman & Littlefield, 2011, p. 16.

Peirce's thought for studies of religion. The reasons for rejecting such a polarity with regard to writings on Peirce and religion will be treated in greater detail in Chapter Four's discussion of commentators on the religious dimension of Peirce's work, but its most basic problem is simply that it neglects both Neville and Ochs as religious applications of Peirce's thought.

With regard to Hegel, Peirce's philosophy does display several significant similarities, especially at first glance. In spite of a long history of critical remarks distinguishing his philosophy from Hegel's, the import of which was that Peirce charged Hegel with refusing to acknowledge the reality of brute actuality (Secondness) or pure chance (Firstness), Peirce's own efforts (particularly in his 1891-93 *Monist* series) at understanding teleological growth in the universe according to a triad of categories raise the question of whether Peirce's criticisms are entirely fair.⁵⁶ Robert Brandom has pointed out two features of Hegel's philosophy that are relevant to Peirce's work:

Hegel *naturalizes* the picture of [global] conceptual norms by taking those norms to be instituted by public social cognitive processes. He also *historicizes* the synthesis of individual subjects in applying concepts [that] is at the same time the historical process by which the norms that articulate the concepts applied are instituted, determined, and developed."⁵⁷

Both of these features could in some sense be attributed to Peirce's philosophy. Yet in spite of their seeming affinities, Hegel and Peirce drew from distinct historical sources, as John E Smith observed in his book, *Purpose and Thought*:

⁵⁶ Criticisms of Hegel can be found in *CP* 1.19, 1.524, 2.32, 6.31, etc, though Peirce's criticisms of Hegel did appear to soften after about 1900, as he perfected his own efforts to establish metaphysical validity to his three categories.

⁵⁷ Brandom, *Perspectives on Pragmatism*, p. 4.

If Hegel went beyond Kant by the rehabilitation of dialectic as the positive and creative advance of thought, Peirce went beyond Kant first by going back to medieval realism and then by coming forward again with his evolutionary conception of thought cast in terms of the “New List of Categories” of 1867.⁵⁸

Subsequent discussions of Peirce’s other influences from scholasticism and empiricist logic, as well as the mathematical innovations in continuity, topology, and projective geometry that he derived from such figures as Arthur Cayley, Georg Cantor, and Alfred Kempe, will better clarify the divergent sources of insight between Hegel and Peirce.

As for Schelling, Peirce cited him less often than Hegel, though there are distinct similarities between Peirce’s metaphysics of *objective idealism*, from his 1892 “Law of Mind” essay, as well as aspects of the category of Firstness during this period.⁵⁹ In her book, *Theology of Anticipation*, Anette Ejsing cites what she labels as a shared epistemological justification for metaphysical voluntarism between Schelling and Peirce:

Peirce justifies his cosmology by the systematic necessity that forces him to institute the science of cosmology...For Schelling, speculative metaphysics is justified by drawing the logical consequences of the Hegelian notion of rational absolutism. This enables him to dismantle reason, announce its powerlessness and thereafter reinstate it in the office of speculative metaphysics.⁶⁰

⁵⁸ Smith, John E. *Purpose and Thought: The Meaning of Pragmatism*. London: Hutchinson and Co., 1978, p. 128. The Kantian influence of the “New List” has already been examined.

⁵⁹ Peirce claimed that he came to immediately regret his phrasing of the term “objective idealism” (CP 6.184), which implies an ontology of substance that does not accord with the logic of relations Peirce had pioneered since the early 1870’s. As Rosenthal puts it, such phrasing generates the “false alternatives based on the historical tradition of substance philosophy and spectator theory of knowledge” (*Speculative Pragmatism*, p. 112).

⁶⁰ Ejsing, Anette. *Theology of Anticipation: A Constructive Study of C.S. Peirce*. Eugene, OR: Pickwick Publications, 2007, p. 63.

To say that, like Schelling, Peirce might endorse a dismantling of reason in his work would not be accurate, though it is true that his conceptions of metaphysics as a discipline open to revision, semiotics as “open to chaos as well as order,” as Neville puts it, and Firstness as a category characterized by spontaneity and chance all reflect affinities with Schelling’s philosophy.⁶¹ Yet however congenial Schelling’s *ideas* might have been to Peirce, in their *logic* he found them wanting, which is a criticism he also applied to Hegel. As he put it:

I came to hold the classical German philosophy to be, upon its argumentative side, of little weight, although I esteem it as a rich mine of philosophical ideas...The English philosophy, meager and crude in its conceptions, has, according to my tests, the advantage of a superior logical accuracy.⁶²

German idealism likewise suffered in comparison to classical metaphysics. As he put it in his preface to “A Guess at the Riddle”:

Aristotle built upon a few deliberately chosen concepts — such as matter and form, act and power — very broad, and in their outlines vague and rough, but solid, unshakable, and not easily undermined; and thence it has come to pass that Aristotelianism is babbled in every nursery...One system, also, stands upon its own ground; I mean the new Schelling-Hegel mansion, lately run up in the German taste, but with such oversights in its construction that, although brand new, it is already pronounced uninhabitable.⁶³

This is to say that, for all their differences with respect to each other in terms of their response to Kant, Hegel and Schelling nonetheless also differ from Peirce *logically*, as Peirce’s logic owed more to certain aspects of scholasticism and British

⁶¹ Neville. *Realism in Religion*, p. 164. Ejsing is right to attribute Peirce’s cosmology to challenges in Peirce’s architectonic in light of his move toward a metaphysics of continuity—his religious conviction is also not to be denied.

⁶² *MS* 1606, p. 3.

⁶³ *CP* 1.1.

empiricism than to German idealism. To explore this other metaphysical “mansion” calls for a return to the biographical thrust of Peirce’s career.

Scholastic and classical philosophy

By the mid 1860’s, Peirce had come to doubt that metaphysics could have any basis for its claims within the limits imposed by Kantian propositional logic. It was during this time that Peirce began reading extensively on medieval and contemporary logic, particularly the works of John Stuart Mill, Augustus De Morgan, and George Boole, but also the scholastic philosophies of William of Ockham and Duns Scotus.⁶⁴ In scholastic philosophy, Peirce found a logical rigor rivaling that of Kant that he felt was lacking among his contemporaries, as well as an admirable commitment to the communal pursuit of truth. Between 1865 and 1867, a shift in focus toward this wider range of sources was discernible in Peirce’s writings, and by 1867 Peirce was likely to have studied at least Aristotle, Boethius, Anselm, Abelard, Peter of Spain, John of Salisbury, Duns Scotus, Thomas Aquinas, and William of Ockham, such that his personal library on medieval logic outpaced even that of Harvard.⁶⁵ Peirce’s favorite among the scholastics was Duns Scotus, whose influence on Peirce’s writings manifested itself in three specific areas: (1) the concept of *haecceity*, or “thisness,” which propounds a subtle realism with regard to the relationship of universals as manifested in individuals; (2) the presence of ideas in

⁶⁴ Brent, *Charles Sanders Peirce: A Life*, p. 66-67. The classic piece on Peirce’s relation to scholastic philosophy is John F. Boler’s *Charles Peirce and Scholastic Realism: A Study of Peirce’s Relation to John Duns Scotus*. (Seattle: University of Washington Press, 1963).

⁶⁵ Murphey, *The Development of Peirce’s Philosophy*, p. 56

the mind *habitualiter*; and (3) the importance of the syllogism in logic.⁶⁶ Although Peirce would later distance himself from scholasticism in some respects in light of the logic of relations, these three features would be retained in later writings in modified form, and Peirce's readings of scholastic thought rank among his most important influences.

It was during the period of his most avid readings of Duns Scotus—approximately 1865-1869—that Peirce became confirmed in his metaphysical realism, and he came to understand the scholastic distinction between realism and nominalism as among the most important in the history of philosophy.⁶⁷ For Peirce, the question of realism versus nominalism carried economic, political, and theological as well as philosophical ramifications, and not only was nominalism the charge that Peirce would level at the legacy of René Descartes in modern philosophy (drawing significantly from Scotus in both style and content in 1868's "Consequences of Four Incapacities"), but "nominalist" would be Peirce's epithet of choice for the rest of his life.⁶⁸ Peirce also shared the scholastics' admiration for Aristotle, to whom Peirce's logic of precision—a form of abstractive reasoning—

⁶⁶ Duns Scotus (ca. 1265-1308) ranks alongside Thomas Aquinas and William of Ockham as among the most significant scholastic philosophers. He argued that universals were real because they corresponded to something out of the mind, and with a logical method predicated upon the subtle use of syllogism (which is simply the act of inferring the truth of a proposition based on two or more other propositions), he propounded the notion of *haecceity* as the property possessed by individuals independently of anything general or universal. The term *habitualiter* will be considered further in discussing Peirce's sense of habit.

⁶⁷ The most immediate context of Peirce's turn to realism was in a correspondence with William Torrey Harris of the St. Louis Hegelians.

⁶⁸ Peirce saw in "Cartesianism" an excess of individualism, false dualism between spirit and world, inaccurate basis of knowledge in personal intuition, and meaningless methodology based on universal, "paper" doubts (*CP* 5.416). Peirce's most explicit attack on the legacy of Descartes may be found in 1868's "Consequences of Four Incapacities," written at the peak of Peirce's scholastic influence (*CP* 1.264).

may be attributed.⁶⁹ Through precision, one is able to infer quality from form, a point on which Peirce chided scholastic philosophy as being unable to grasp:

The scholastics...regarded Aristotle as all but infallible...But then they had great difficulty with those opinions of their master which depended upon his conceiving of matter more primitive than form...The mode of being that, in some sense, anteceded individual existence, they would have held to be one in which there was form without matter.⁷⁰

Though Peirce admired Scotus's realism, and retained a version of Scotus's category of *haecceity* in relation to individuality, he came to reject the scholastic doctrine of real universals inhering in concrete individuals. The primary reason for this was his work in the logic of relations that came about around 1870, one of the major advances of his career. As Michael Raposa has observed, the scholastics' lack of a logic of relations meant that "they could speak of classes, but not of *systems*," and that "the 'single existing thing' that Scotus describes is better defined as a single system of meaningful relations, general in nature, and defined by specific laws or habits."⁷¹ As such, Peirce came to abandon the preoccupation with *essence*, longstanding within both classical and scholastic thought, in favor of *habits*, a significant step toward what would become pragmatism.

As for such classical figures as Plato and Aristotle, Peirce generally held them in high esteem. Aristotle in particular received praise, as Peirce felt that Aristotle was a "thorough-paced scientific man" (generally a high compliment from Peirce), yet one who, unlike the modern scientist, "ranged all over knowledge" in a manner

⁶⁹ The logic of precision will be treated alongside Peirce's conception of habit in the "nested continua in context" section of this chapter.

⁷⁰ *CP* 6.637.

⁷¹ Raposa, *Peirce's Philosophy of Religion*, p. 18-21.

as to include metaphysics within logical scrutiny. Ever modest, Peirce would on occasion liken himself to Aristotle:

As a man of scientific instinct, [Aristotle] classed metaphysics...among the sciences...along with mathematics and natural science. This theoretical science was for him one thing, animated by one spirit and having knowledge of theory as its ultimate end and aim...Now, Gentlemen, it behooves me, at the outset of this course, to confess to you that in this respect I stand before you an Aristotelian and a scientific man.⁷²

Peirce likewise admired Plato's facility with mathematics, averring in a manuscript from around 1893 to call the fourth chapter on a proposed comprehensive volume of his philosophy "Plato's World: An Elucidation of the Ideas of Modern Mathematics."⁷³ Peirce's admiration for Platonic mathematics and self-identification with Aristotle's system-building in logic and metaphysics through categories would continue across Peirce's life, and the list of references he made to them are too many to be given in this brief space.

In regard to the nested continua model, however, there is at least one particular feature of Peirce's debt to Aristotle and Plato that should be mentioned, and it lies in the implications of the classical distinction between final and efficient causality as rendered according to the metaphysics of continuity.⁷⁴ Peirce described the epistemology of final cause as follows:

In regard to natural objects, however, it may be said, in general, that we do not know precisely what their final causes are. But need that prevent us from ascertaining whether or not there is a common cause by virtue of which

⁷² CP 1.618.

⁷³ CP 8.5.

⁷⁴ Final and efficient cause represent the third and fourth of Aristotle's four types of causation (the first two are, respectively, formal and material causation, referring respectively to the form and substance of that which undergoes change); efficient cause refers to the immediate agent that enacts a change (e.g. the carpenter who saws a table in half), whereas final cause refers to the *purpose* for which the change takes place (e.g. preparing a new piece of wooden furniture for the royal court).

those things that have the essential characters of the class are enabled to exist?⁷⁵

The answer to Peirce's rhetorical question is: no, the inability to know *precisely* what final causes are need not prevent us from making general or vague claims as to what a plausible final cause of some phenomenon might be; as Peirce put it, real final causation is the "mode of bringing facts about according to which a general description of result is made to come about, quite irrespective of any compulsion for it to come about in this or that particular way."⁷⁶ Contrary to the claims of Descartes and his philosophical legatees, final causes need not be (and often *are* not) excluded from scientific reasoning, for they set general parameters of potentiality within which efficient causes may proceed, even if the *absolute* final cause cannot be known. Efficient and final causation are complementary—as Peirce put it, "the causal necessitation of more concrete *fact* does not prevent a more prescinded, or general, *fact* of the same event from being quite fortuitous."⁷⁷ A single event can thus be explained by a plurality of different causes of varying levels of generality depending on the framework through which the cause of the event is sought.

Peirce's commentary on Aristotle regarding causation is noteworthy for the metaphysics of the nested continua mode. In relation to the metaphysics of continua, Peirce's point about causation at varying levels of generality becomes more significant:

We must suppose that as a rule the continuum has been derived from a more general continuum, a continuum of higher generality....From this point of

⁷⁵ CP 1.204.

⁷⁶ CP 1.211.

⁷⁷ CP 6.93.

view we must suppose that the existing universe...is an offshoot from, or an arbitrary determination of, a world of ideas, a Platonic world; not that our superior logic has enabled us to reach up to a world of forms to which the real universe, with its feebler logic, was inadequate.⁷⁸

Proceeding on the claim that there can be no intelligibility unless there is a more general form that renders it intelligible, Peirce may have seen the effort to clarify the means by which the empirical world relates to Plato's forms, and to establish a matrix of taxonomies for the empirical world on its own terms, as among the prevailing aims of that which remains from Aristotle's writings.⁷⁹ In his "Law of Mind" essay, Peirce touched upon such a layering of causality by referring to ordinal distinctions as *Aristotlicity* (he also called infinite divisibility *within* a given order *Kanticity*), reflecting his understanding of Aristotle in terms of ordinal number as well as prescise logic by which erstwhile habitual, implicit, and general orders become rendered explicit and brought into conscious analysis.⁸⁰ In terms of nested continua, this can be described as the effort to point through existing continua, drawn as circles, to reason from some object or event at a low level of generality (explained most immediately by smaller circles, as causes relatively more efficient than final) toward more general interpretive frameworks that themselves provide causes and set hypothetical parameters within which future events of a similar *type* might occur (larger circles, as relatively more final than efficient). Raposa describes Peirce's sense of causation in relevant terms in this passage:

⁷⁸ CP 6.191-192

⁷⁹ It is true that, along with Thirdness, Peirce likewise held Firstness to be general, and even described the generality of entities as Firsts in terms of Platonic forms (CP 6.452). Yet subsequent discussions of the distinction between pure *possibility* as Firstness and *potentiality* as possibility mediated through the general forms of Thirdness will explore the nature of Plato's bearing on the presumption of absolute Thirdness.

⁸⁰ CP 6.122-123.

Causes define the essence of a living system of relations, determining the manner in which this whole calls out its parts. That is to say, they are laws governing the behavior of the fragments of such a system. These ideas do have a power of their own, but their real power consists in their ability to get themselves thought; to create their own proponents. Ideas are not locked up in somebody's skull but constitute the very environment to which human minds must adapt and within which they develop.⁸¹

The nested continua graph's circles, as interpretive frameworks to render some object or set of objects intelligible at varying levels of generality, can be understood as efficient *and* final causes (since the circles, as referring to existent sets of relations, refer both to the past, as the mode of time for that which is existent, and also the future, as the general conditions of potentiality for that which *may become* existent) with the relative finality increasing as one proceeds through nested continua toward absolute Thirdness as both ultimate intelligibility and ultimate final cause.

Empiricist logic and philosophy

Peirce's encounter with empiricist logic and philosophy coincided with his readings of scholasticism and classical philosophy. Peirce's reactions to the writings of such diffuse figures as J.S. Mill, John Locke, David Hume, Augustus De Morgan, and George Boole, among others, were influenced by his scholastic readings in two ways: as informed by the nominalism/realism divide, and as the impetus for developing the logic of relations that would move Peirce's thinking away from the emphasis on metaphysical essences and toward the pragmatic writings of the 1870's.⁸²

⁸¹ Raposa, *Peirce's Philosophy of Religion*, p. 81.

⁸² Often associated with the rise of natural science, a prominent species of empiricism has its historical roots in the seventeenth and eighteenth centuries, particularly in Britain through the writings of such thinkers as John Locke (1632-1704) and David Hume (1711-1776). In logic,

Regarding the first of these two points, the question of nominalism versus realism, Peirce's reactions to these figures was fairly straightforward: he thought they all were nominalists, lacking the proper appreciation for the bearing of thought on the real generalities of the world (and vice versa).

Regarding the second point, on the logic of relations, a transition in Peirce's thinking may be observed in the following two passages. As Peirce wrote in 1865:

[George] Boole's system cannot describe a lot of ordinary speech, but it is capable of noting points which common forms of language cannot.⁸³

By 1870, Peirce had revised his judgment on the extent of Boole's relevance:

Boole's logical algebra has such singular beauty, so far as it goes, that it is interesting to inquire whether it cannot be extended over the whole result of formal logic, instead of being restricted to that simplest and least useful part of the subject, the logic of absolute terms, which when he wrote, was the only formal logic known.⁸⁴

Having recognized a new application for Boole's work, Peirce went on later that year, in his "Descriptions of a notation for the logic of relatives, resulting from an amplification of the conceptions of Boole's calculus of logic," to describe what the change entailed:

In thought, an absolutely determinate term cannot be realized, because, not given by sense, such a concept would have to be formed by synthesis, and

empiricism refers to the clarification of the ideas attainable through experience. In his arguments against empiricist philosophy, Peirce found an ally in the Scotsman Thomas Reid (1710-1796), a contemporary and compatriot of Hume's who had sought to argue against Hume's skepticism on grounds of commonsense perception of indubitable real objects. Although finding fault with Reid's logic, Peirce incorporated Reid's ideas into what he would come to call "critical common-sensism," as well as into aspects of his category of Secondness. In terms of the British mathematicians that spurred Peirce onward in his investigations of continuity, such as Arthur Cayley or Alfred Kempe, these figures will be discussed in subsequent sections on the Existential Graphs and the metaphysics of continuity.

⁸³ *W* 1, p. 231. George Boole (1815-1854) was an English mathematician and logician whose invention of an algebraic system of notation for truth values (the Boolean logic) has proven influential to modern computational studies as well as Peirce.

⁸⁴ *W* 2, p. 359.

there would be no end to the synthesis because there is no limit to the number of possible predicates. A logical atom, then, like a point in space, would involve for its precise determination an endless process. We can only say, in a general way, that a term, however determinate, may be made more determinate still, but not that it can be made absolutely determinate.⁸⁵

In reading this passage, it is clear that the scholastic and classical assumption of an entity in terms of its possessing an unchanging essence was no longer tenable in Peirce's thought, though he would retain the Scotistic understanding of *haecceity* in aspects of the categories of Secondness (the brute actuality of an object) and Firstness (the qualities of an object that are real irrespective of anything else). Without venturing into the technical algebra that accompanied Peirce's discussions of the logic of relations, a simplistic rendering of its meaning may be given, which is that for any entity "A" or "B," there is some "C" that brings them into relation, without which they could not be rendered intelligible. The reason for Peirce's claim that no logical atom may be rendered "absolutely determinate" is because, since no "A" or "B" can be known without some "C," and since "C" is liable to change, or have a *further* "C" that renders it intelligible, there is always some amount of uncertainty and of vagueness with respect to an absolutely precise determination of some entity.

American influences

The best known of the American influences on Peirce's thought are those figures associated with the origins of the pragmatic philosophical tradition,

⁸⁵ W2, p. 389.

particularly William James.⁸⁶ In his popular work, *The Metaphysical Club*, Louis Menand effectively traces the historical trajectories of pragmatic thought from its beginnings in Cambridge, Massachusetts following the American Civil War through the Second World War.⁸⁷ Robert Brandom's *Perspectives on Pragmatism*, while weak on the early decades of pragmatism, picks up where Menand's thread leaves off, tracing pathways of pragmatic thought across the second half of the twentieth century with particular attention to Wilfrid Sellars and Richard Rorty.⁸⁸ In terms of understanding Peirce's career, however, it is very important to recognize that the version of pragmatism made famous by these figures is not identical to the unique concerns that animated Peirce's work, a point that applies even to Peirce's more immediate contemporaries such as James and John Dewey. While later pragmatists would sometimes place equal importance on the logical rigor that Peirce extolled, or

⁸⁶ The decades-long relationship of Peirce and William James (1842-1910) is deserving of a full-length study in its own right—for further reading, see A.J. Ayer's *The Origins of Pragmatism: Studies in the Philosophy of Charles Sanders Peirce and William James* (London: MacMillan, 1968), as well as Menand's *The Metaphysical Club*, which significantly treats John Dewey and Oliver Wendell Holmes, Jr. as well as other figures. Peirce and James, very different in personality and cast of thought, nonetheless have arguably been as collectively influential on American intellectual life as any pair of thinkers in the nation's history. In one of his later writings, Peirce would sum up James's personality in relation to his own in the following terms: "His comprehension of men to the very core was most wonderful. Who, for example, could be of a nature so different from his as I? He so concrete, so living; I a mere table of contents, so abstract, a very snarl of twine. Yet in all my life I found scarce any soul that seemed to comprehend, naturally, [not] my concepts, but the mainspring of my life better than he did. He was even greater [in the] practice than in the theory of psychology" (*CP* 6.184).

⁸⁷As for the "metaphysical club," it was this club, which included William James, Chauncey Wright, Nicholas St. John Green, Oliver Wendell Holmes Jr., Francis Ellingwood Abbot and John Fiske, and which allegedly met in 1872, which Peirce would later acknowledge as the inception of pragmatic philosophy (*CP* 5.12). He emphasized particularly the definition of belief as "that upon which a man is prepared to act," which developed into what became known as the pragmatic maxim in "How to Make Our Ideas Clear": "Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object" (*W* 3, p. 274).

⁸⁸ Robert B. Talisse and Scott F. Aikin have likewise collated some of the most significant pragmatist essays of the nineteenth and twentieth centuries in their helpful compilation, *The Pragmatism Reader* (Princeton, NJ: Princeton University Press, 2011).

seek to develop Peirce's theory of signs (which goes toward explaining why Peirce's best-known writings remain his "New List of Categories" as well as "The Fixation of Belief" and "How to Make Our Ideas Clear" from the "Illustrations of the Logic of Science" series of 1877-78), arguably none has shared Peirce's overwhelming concern with outlining a philosophical architectonic by way of categories, and none have combined such idealist, scholastic, classical, and empiricist influences as those given above with such strict attention to logic and metaphysics (which goes toward explaining why Peirce's most speculative writings, such as the cosmology of his first *Monist* series, have been among those most criticized).⁸⁹

To properly trace Peirce's most significant American influences requires a bit of biographical backtracking. As mentioned at the beginning of this section, the first significant influence on Peirce's intellectual life was his father, Benjamin Peirce. Often hailed as the foremost American mathematician of his time, Benjamin Peirce held the position of Perkins Professor of Astronomy and Mathematics at Harvard from 1842 until his death in 1880, and was the author of *Linear Associative Algebra*, published in 1882 under Charles' editorship.⁹⁰ In his *Algebra*, the elder Peirce asserted mathematics as preeminent among intellectual disciplines, for "it deduces from a law all of its consequences, and develops them into the suitable form for comparison with observation, [thereby measuring] the strength of the argument from observation in favor of a proposed law or of a proposed form of application of

⁸⁹ For one example of what W.B. Gallie called the "black sheep or white elephant" of Peirce's philosophy, see T.L. Short's article in the *Transactions of the Charles S. Peirce Society*, "Did Peirce Have a Cosmology?" (vol. 46, no. 4, Fall 2010, p. 521-43), in which Short argues that Peirce did not even *have* a cosmology, and that Peirce's writings on such matters are errant aberrations on his career.

⁹⁰ Menand, *The Metaphysical Club*, p. 153.

a law.”⁹¹ Benjamin Peirce’s confidence in mathematics also complemented his religious commitment (he was a devout Unitarian), which took the form of an idealist ontology that held that thought and matter obey the same laws because both have a common origin in the mind of the Creator.⁹² From a very early age, the young Charles was his father’s favorite among the Peirce children, and the two would often play games of logic together. This emphasis on the importance of logic, as well as the aforementioned faith in the continuity of mind and matter, represented Benjamin Peirce’s most lasting bequests upon his son’s intellectual outlook.

Another influence on the young Peirce was his friend Francis Ellingwood Abbot, with whom he developed an early affinity for the aesthetic philosophy of Friedrich Schiller (1759-1805). In 1857, a seventeen-year-old Peirce wrote a college essay entitled “The Sense of Beauty never furthered the Performance of a Single Act of Duty,” in which he quoted from Schiller’s *Aesthetic Letters* the assertion that “beauty is in the highest degree fruitful with respect to knowledge and morality.”⁹³ Reading through Schiller’s work, one sees several places where Peirce may have found suggestions about the importance of an aesthetic ideal, such as in Schiller’s insistence upon a “play-impulse” (*Spieltrieb*) as an instigator of rational inquiry.⁹⁴ Having taken as an example his father’s idealist conception of

⁹¹ Peirce, Benjamin. *Linear Associative Algebra*. New York: Van Nostrand, 1882, p. 1.

⁹² Menand, *The Metaphysical Club*, p. 156.

⁹³ If the title of this essay appears at odds with the given quotation, this is because Peirce chose his title as a reference to John Ruskin, who had written that Schiller, in Letter 19 of his “Esthetic Letters, observes that the sense of beauty never furthered the performance of a single act of duty.” The essay was intended as a rebuke to this quotation. *W1*, p. 10.

⁹⁴ Orange, Donna M. *Peirce’s Conception of God: A Developmental Study*. Lubbock, TX: Institute for Studies in Pragmaticism, 1984, p. 3. Michael Raposa also devotes significant space to discussing this influence in his *Peirce’s Philosophy of Religion*, particularly in terms of Peirce’s sense of “musement”

mathematical truths, Peirce was receptive to Schiller's incorporation of aesthetics into philosophy, and this influence was to factor in such later writings as 1908's "A Neglected Argument for the Reality of God." In terms of Peirce's religious beliefs, one finds sources of influence, once again, in his father's Unitarian faith, but also through his first marriage to Melusina (called "Zina") Fay, who had written a feminist interpretation of the doctrine of the Trinity.⁹⁵ Fay converted Peirce to the Trinitarianism he would thereafter uphold. Still another source is evident in Peirce's reception of Henry James, Sr.'s book on Emanuel Swedenborg.⁹⁶ Peirce's religious influences will be further discussed in Chapter Four.

Nested continua in context

Having traversed some of Peirce's prevailing influences, the present task is to explain how some of Peirce's most important ideas bear on the nested continua model. There are seven elements from Peirce's primary texts to be treated: Existential Graphs, the categories, abduction, vagueness/generalality, ordinal/cardinal number, precision/habit, and infinitesimals/continua, along with an eighth element, emergence, not mentioned directly in Peirce's work but, as Rosenthal shows, quite compatible with many of its aspects. Although the primary

as the pure play of the mind by which one comes to recognize the divine in direct experience. (*Peirce's Philosophy of Religion*, p. 109).

⁹⁵ Robinson, Andrew. *God and the World of Signs*. Leiden: Brill, 2010, p. 108.

⁹⁶ Peirce wrote a review of Henry James, Sr.'s book on the religious dimension of the thought of the eighteenth-century Swedish philosopher Emanuel Swedenborg (1688-1772). In his review, Peirce criticizes the style and reasoning in the book's composition, yet praises its core idea of connecting one's metaphysics with one's spirituality; as he writes, that though "deficient in argumentation, [the work] contains some interesting philosophical doctrines."⁹⁶ He concludes his review by saying that "to many a man who cannot understand it, [James' book] will afford, as it has to us, much spiritual nutriment." (*W2*, p. 438).

aim of this section is to relate Peirce's idea to the nested continua model, further context regarding Peirce's career and suggestions for further reading will be given as needed.

Following significant accomplishments in the 1870's, in showing how the logic of relations may be rendered algebraically, from about 1896, Peirce came to devote considerable effort in exploring the means by which the logic of relations *itself* might be made to signify iconically, an effort he called his Existential Graphs.⁹⁷ These Graphs remain relatively obscure even among many Peirce scholars, yet Peirce himself insisted that understanding their logic was as simple as "stepping from a floating log into the water."⁹⁸ Confessing to a preference for visual diagrams over verbal explanations, Peirce wrote in a 1909 manuscript: "I do not think I ever *reflect* in words...I employ visual diagrams, firstly, because this way of thinking is my natural language of self-communication, and secondly, because I am convinced it is the best system for the purpose."⁹⁹ The Existential Graphs offer invaluable lessons

⁹⁷ W5, p. 243.

⁹⁸ MS 280, p. 23-24. Among Peirce scholars, such notable figures as Murray Murphey or Robert C. Neville have given the Existential Graphs relatively scant attention; at the same time, the graphs have received extended treatment from Peter Ochs, Michael Raposa, and Don Roberts, who published a very helpful book-length commentary on them. As Don Roberts notes in his work, *The Existential Graphs of Charles S. Peirce*, such commentators as W.V.O. Quine felt that the graphs were intended to facilitate the analysis of logical structure, but not necessarily to facilitate the drawing of inferences (The Hague: Mouton, 1973, p. 18). Such oversight owes in part to the unfinished nature of the Existential Graphs, and also to the fact that its aims of iconically rendering logical operations were unique in the history of mathematics. Euler and Venn had used diagrams, in 1761 and 1880 respectively, to analyze classes, but the 1882 (responding to a paper by British mathematician Alfred Kempe) effort from Peirce to diagram the logic of relatives was a novelty, as were his more extended efforts in the 1890's and 1900's regarding the Existential Graphs. Sun-Joo Shin's *The Iconic Logic of Peirce's Graphs* (Boston: MIT Press, 2002) represents, along with Roberts's book and research from Kenneth Ketner, one of the only full-length treatments available on the Existential Graphs. It is also true that Peirce began investigation of iconic relational logic while at Johns Hopkins in 1882, but did not pursue these investigations further until 1895-96.

⁹⁹ MS 619, p. 8.

for nested continua as an interpretive diagram. For as the Existential Graphs aim for the most minute steps of inference to be analyzed visually, picking a method to pieces and finding out what its essential ingredient are, so does the nested continua model aim to understand the distinctions within interpretive experience by dividing them visually into independently analyzed continua and understanding them in terms of qualities displayed to the metaphoric imagination.¹⁰⁰ Although the logical rules for interpreting the nested continua model are differ completely from those of the Existential Graphs, lacking perhaps the logical explanatory power—and certainly the logical and mathematical complexity—of Peirce’s efforts, simply as a demonstration of the unique benefits of iconic signification, the Existential Graphs are instructive.

In Peirce’s writings, the Existential Graphs took the form of three distinct efforts, the Alpha, Beta, and Gamma graphs, each of which built upon the rules of the previous. The Alpha graphs aimed to capture how relations between entities may be captured visually, the Beta aimed to link such relations with entities in monadic, dyadic, and triadic forms, and the Gamma graphs, which were never finished, aimed to link such relations and entities with broader *systems* of relations, including the graphs themselves. With regard to each of these three forms, what persists across Alpha, Beta, and Gamma is a set of logical rules aimed to guide the qualitative (iconic) manifestation of interpretation. As Joseph L. Esposito has put it:

¹⁰⁰ In the language of Peirce’s categories, such signification falls under what Peirce in an 1898 paper, “The Logic of Mathematics; An Attempt to Develop My Categories From Within,” called the Thirdness of Firstness. This paper will be discussed below in regard to the role played by the categories in the model.

The Existential Graphs...[afford] an efficient logical system whereby conceptions may be analyzed into their indecomposable elements...The graphs do not require an endless investigation into logical interpretants of logical interpretants, for their ultimate interpretant is embodied in their being used; as such they are an extremely efficient way of symbolizing concepts.¹⁰¹

Featuring such imaginative terms as “sheet of assertion” or “universe of discourse,” the graphs themselves provided a mediator, in the form of a “Platonic idea” by which these entities may be sorted through and analyzed in terms of their qualities—quite similar, in fact, to the function of a metaphor.¹⁰² Rather than simply reproducing ideas in translated form, the graphs allowed, through their iconic quality, for novel, unexpected, and non-cognitive elements to enter into a conception and be interpreted. As Peirce put it:

One can make exact experiments upon uniform diagrams; and when one does so, one must keep a bright lookout for unintended...changes thereby brought about in the relations of different significant parts of the diagram to one another....Experiments upon diagrams are questions put to Nature of the relations concerned.¹⁰³

Although Roberts has pointed out that the rules that guide the use of the graphs “must be such as to never transform a true premise into a false conclusion,” the fixity of the rules themselves need not obviate the hypothetical, unexpected, and playful aspects of the meanings uncovered by the graphs.¹⁰⁴ So long as the rules are

¹⁰¹ Esposito, Joseph L. *Evolutionary Metaphysics: The Development of Peirce's Theory of Categories*, p. 226, 228. As to the meaning of the terms “logical interpretant” and “ultimate interpretant,” both of which stem from Peirce's later writings on semiotics, these refer respectively to “the meaning of a general concept” (CP 5.475) and “that which would finally be decided to be the true interpretation if consideration of the matter were carried so far that an ultimate opinion were reached” (CP 8.184).

¹⁰² The term “universe of discourse” is referenced in relation to the Aristotelian syllogism (CP 2.323), but bears on the Existential Graphs, as well.

¹⁰³ CP 4.530.

¹⁰⁴ Roberts, *The Existential Graphs of Charles S. Peirce*, p. 40.

followed consistently, the graphs allow for different logical functions to be tested and re-tested in multiple ways.

Without presuming to discuss these rules exhaustively, we can examine some of Peirce's rules for employing the Existential Graphs. Regarding the Alpha graphs, there are only three basic symbols: the sheet of assertion (the entire two-dimensional space), the cut (a circle drawn on the sheet), and the graph (a marking made either in the circle or outside of it).¹⁰⁵ As part of the sheet of assertion, the graph (also called, in its specific form, the graph-instance), is to be understood as contextually informed, which is to say that some monadic graph-instance X "as blue" is actually understood as "under certain specifiable conditions—in relation to the cut/circle, which itself is within the sheet of assertion—X will tend to behave as being blue." As Roberts points out, in the Existential Graphs, to mark a graph is to assert it, and to encircle a graph is to negate it; to write two propositions together is to assert a conjunction, e.g. "Billy loves Judy *and* Sally prepares toast." In the Gamma graphs, the subjects of the propositions in conjunction may be rendered textually, while in the Beta graphs the same would be drawn as "—loves—*and*—prepares—".¹⁰⁶ It is important to point out that while the nested continua model shares neither of these rules, it likewise presumes the existence of what is drawn and maintains that markings/circles are contextually informed in relation to each other, the graph itself, and the person interpreting the graph. Also congenial is the fact that the Beta Graphs allow one to differentiate between *some* entity and *any/every* entity in terms

¹⁰⁵ Ibid. p. 31.

¹⁰⁶ Ibid. p. 28.

of its being drawn either within or without the cut, a point to be explored subsequently in terms of the distinction between vagueness and generality.

There are two further similarities to the nested continua model that bear mentioning. These are the required presence of a *graph-user*, as well as the Peirce's understanding of encircling cuts in the terminology of *nesting*. Regarding the required presence of the *graph-user*, the origins of this point lie in a paper by Alfred Kempe. Kempe's work on the formal foundations of mathematics—a major impetus for the reasoning that led Peirce to the Existential Graphs—impressed upon Peirce that he could not capture *ultimate* mediation in a mere diagram, as any diagram requires that some mediator, in drawing the graph, changes the proposition “—represents—” to that of “—is the form of—with regard to—.” The form of the Graphs is understood as a vague logical structure to be specified by whomever uses it, and only through what Esposito calls “living mediation” can that which is rendered on the graph have application as meaningful.¹⁰⁷ The recognition of an interpreter as necessary to supply the graph with its genuine relations speaks to a kind of analytical pluralism to the Existential Graphs that the nested continua model aims to emulate, as the graphs, though informed by logically objective rules, are always used by some particular person or set of people; the relations rendered represent the relations as intelligible from *that person's point of view*, yet without categorically denying the objective reality of what is imagined.

¹⁰⁷ Esposito, *Evolutionary Metaphysics: The Development of Peirce's Theory of Categories*, p. 162. Peirce also discusses this sense of mediation as inescapable in iconic signification in his response to a metaphor given by his contemporary, Josiah Royce, regarding the signification of a map of England (CP 8.122).

Another, more specific source of relevance between the Existential Graphs and the nested continua model is to be found in a specific manuscript of Peirce.¹⁰⁸

In this manuscript, Peirce discussed the notion of *nesting* in the following terms (emphasis added):

If there be a collection, i.e. definite plural of cuts, of which one is placed in the sheet of assertion, and another encloses no cut at all, while every other cut of the series has the area of another cut of this collection for its place, and has its area for the place of still a third cut of this collection, then I call that collection a *nest*, and the areas of its different cuts *its successive areas*, and I number them ordinally from the sheet of assertion as origin, or zero, with an increase of unity for each passage across a cut of the nest inwards that one can imagine some insect to make if it never passes out of an area that it has once entered.¹⁰⁹

Although rendered here in typically abstruse form, Peirce is simply describing the Existential Graphs in the form of concentricity. Since according to Peirce's rules, to encircle a proposition is to *negate* that proposition, the sense of "nest" as given here does not bear on nested continua in that specific way. With regard to ordinal arrangement, however, as well as an inferred increase of unity in proportion to passage inward through the circle, certain profound similarities apply. For the relation of a given continuum rendered as a circle to another on the nested continua model is to be related ordinally, with any markings not drawn as circles to be related cardinally. As to the notion of increasing unity across an inward progression, Peirce's manuscript's bearing on nested continua is not quite so straightforward, but relevant nonetheless. For nested continua, rather than an increase in *unity* as one progresses toward the center of the graph, one finds an

¹⁰⁸ MS 650.

¹⁰⁹ Cited in Roberts's *The Existential Graphs of Charles S. Peirce*, p. 37.

increase in *specificity*. To be sure, an entity's *internal* unity might be understood to increase alongside its specificity, though *only in proportion to an inner continuum's relative distance from its outer encircling continua*, while its *unity in relation to entities within the same order/circle* is understood to decrease; considered in themselves, all continua have the same degree of unity, since a continuum is that which in all its parts remains itself.

This point about the unity of a continuum considered unto itself as distinct from its unity considered in relative terms raises the question of what might be considered the *essential* features of any marking/circle on the nested continua graph, as opposed to its *conditional* features, which are in relation to other markings/circles.¹¹⁰ Related to this question is a distinction between thinking as an *object* of thought versus thinking *in action*, the movement of thinking. The hypothesis of the Existential Graphs is that there are indeed essential features of real objects of thought, which persist whether one is thinking about them or not, but that the process of thought is such that objects are incessantly being added and subtracted from a sequence of thoughts in an ongoing process. The brilliance of the Graphs as expressions of an iconic logic of relations is that it is able to bring together thinking-as-object and thinking-as-process as close together as possible in such a way as to not only glean insights as to generate insights on thinking, but also insights on the objects to which thinking refers. As Peirce put it: "A man goes through a process of thought. Who shall say what the nature of that process was?"

¹¹⁰ The distinction between essential and conditional features forms an important part of the metaphysics of Neville's axiology of thinking, to which he credits Paul Weiss as the source. Neville's axiology forms the subject of much of the second half of Chapter Three.

He cannot; for during the process he was occupied with the object about which he was thinking, not with himself nor with his motions.”¹¹¹ This is done by portraying the various objects of thought as they arise and disappear from view as “skeleton sets” for thinking in action: “To one skeleton set is added another to form a compound set. Then the first, perhaps, is dropped and the ideas which remain are viewed in a new light.”¹¹² The objects of thought pass along, but the interpretive context through which this proceeds persists, and may be visually displayed on the Graphs as having a qualitative uniqueness of its own. Roberts describes this well:

The sheet of [the Existential Graphs], in relation to the scribed graphs which are determinations of that sheet, represents the mind in relation to its thoughts, which are determinations of that mind. The mind as a comprehensive thought is represented by all the permissible [not actual] transformations of the total graph.¹¹³

The nested continua model operates on the same basic understanding of the Existential Graphs as Roberts describes them. Anything to be drawn on the graph represents an object of thought that is presumed to possess some set of essential features independently of their being interpreted (which will be discussed in greater detail in Chapter Four, regarding normativity and singular qualitative irreducibility), some *haecceity* that is to be respected and investigated. At the same time, the act of its being drawn enacts a *movement* of thought, and the intention of drawing a circle on the graph is to bring to light some existent thing both as an object of thought on its own, and also as a rule for interpreting other things, as something that renders those other things intelligible according to its norms. The

¹¹¹ CP 2.27.

¹¹² CP 7.340.

¹¹³ Roberts, *The Existential Graphs of Charles S. Peirce*, p. 113.

nested continua model lacks the logical sophistication of Peirce's Existential Graphs, and is neither able nor intended to display the entirety of one's intellection at any given moment. Like Peirce's Graphs, however, the nested continua model understands that which is marked upon its graph to signify iconically and yet remain relational with: (1) other objects (markings) and interpretive frameworks (circles), which can be drawn or erased at will; (2) the interpreter of the graph: and (3) most important for theology, the objective source of feeling and spontaneity (Firstness, in the center) and the ultimate framework of intelligibility (Thirdness, beyond the outermost circle).

The categories

From as early as 1859, when Peirce first discussed a triad of "I," "It," and "Thou," he displayed a fascination with triads that he would never abandon.¹¹⁴ As noted above, by the time of 1867's "New List of Categories," he had begun to work through his early response to Kant, and in this text introduced his categories (bookended by "being" and "substance") in the following terms:

Quality (reference to a ground)
Relation (reference to a correlate)
Representation (reference to an interpretant)¹¹⁵

This text, considered one of the germinal documents of semiotics, synthesized much of Peirce's previous work on the forms of logical relation and pronounced that all signification could be expressed by way of these three categories. By this point Peirce had come to denote his categories in numerical terms, as Firstness,

¹¹⁴ *W* 1, p. 8.

¹¹⁵ *W* 2, p. 54.

Secondness, and Thirdness, with quality seen to refer to Firstness, relation Secondness, and representation Thirdness. As to the term “interpretant,” to which representations refer, this term had been introduced publically in a lecture given in 1866, and was initially understood as “something in the Mind of the Interpreter, which something, in that it has been created so by the sign...has been...also created by the Object of the Sign.”¹¹⁶ Initially, Peirce considered the interpretant, as Thirdness, to be the only real category among the three, though he would come later to assert the reality of Secondness and Firstness, as well. This thesis shares Peirce’s conviction that all three categories are real.

The move toward a realist understanding of all three categories reflected a shift in Peirce’s sense of the categories more generally. Having initially presented his categories in logical and *a priori* terms, by the 1890’s he had come to present them metaphysically, as modes of being, and cosmologically, as objective tendencies in the universe. Peter Ochs describes this transition in the following terms:

Peirce sought to...adopt the principles of logic as principles of being, in this way achieving without categories of substance and being what previous metaphysicians had achieved with them...[In] his work between 1867 and 1903, Peirce reintroduces these conceptions indirectly by placing his logic of relatives in the service of a foundational inquiry into reasoning’s ultimate presuppositions (as being or “ground”) and ultimate consequences (as substance or “interpretant”).¹¹⁷

¹¹⁶ CP 2.493. It bears mentioning that the various sub-types of interpretants, as well as the many changes in Peirce’s understanding of the interpretant’s function within his semiotics across his career, would comprise too much space than is possible in this project, as its focus is not specifically semiotics. For purposes of clarification, the relatively anodyne “significate context” will serve as a general definition for “interpretant” within this thesis unless otherwise specified. For further reading, T.L. Short’s *Peirce’s Theory of Signs* is a helpful guide.

¹¹⁷ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 144.

While Ochs understands such an evolution as part of an errant tendency toward foundationalism that Peirce rightly abandoned after 1903, the present project sees in Peirce's move toward a metaphysical reading of his categories (minus the sense of substance) one of the most insightful resources for the nested continua model. Unless otherwise distinguished, it will employ the terms Firstness, Secondness, and Thirdness as Peirce defined them in his 1891 article, "The Architecture of Theories":

First is the conception of being or existing independent of anything else. Second is the conception of being relative to, the conception of reaction with, something else. Third is the conception of mediation, whereby a first and second are brought into relation.¹¹⁸

In terms of the markings/circles to be made upon the nested continua model, the reality of all three categories entails that the relative placement of anything to be rendered on the graph reflects an epistemological rather than ontological priority. For anything that is drawn has first entered into the imagination, and should the *object* of the imagination turn out to exist in some form other than imagined, or not to exist at all, the imagining of that object is nonetheless real, and there is no *a priori* categorical reason for doubting it.

Firstness comprises all the qualities we perceive in the world, from colors to sounds to the feelings elicited from our experience of such things. It is the most elemental base available to experience, akin to what Louis Armstrong said about jazz, which is that if someone has to tell you, you cannot know. Peirce described Firstness in different ways at various points in his writings, from that of freshness,

¹¹⁸ CP 6.32.

freedom, immediacy, feeling, quality, vivacity, and independence¹¹⁹, being-in-itself¹²⁰, and mere potentiality.¹²¹ For purposes of this thesis, a sense of Firstness as irreducibility, spontaneity, chance, feeling, and novelty is to be emphasized, though it is important to distinguish two senses of Firstness: “absolute Firstness” and “mediate Firstness.” Regarding the former, Sandra B. Rosenthal ably describes its radical implications to substance metaphysics:

There emerges from Peirce’s...characterization of Firstness in perception a metaphysical category of Firstness that is neither a remnant of traditional conceptions of determinate repeatable qualities nor a remnant of traditional conceptions of eternal Platonic possibilities. Rather, what emerges is a Firstness that attributes to reality precisely those characteristics most antithetical to such traditional conceptions. Firstness in this sense not only underlies Peirce’s radical rejection of foundationalist-antifoundationalist alternatives in epistemology, but also anticipates his rejection of the ontological alternatives offered by a tradition of substance metaphysics.¹²²

Absolute Firstness is prior to predication, and as unmediated, is neither available to direct consciousness nor differentiable.¹²³ It permits only apophatic speech, though, perhaps arguably, it may be felt. Mediate Firstness, on the other hand, is Firstness perceived in some quality of an existent object and mediated both through that object and some interpretive framework that renders it intelligible. The feeling elicited by a particular piece of music, for example, is Firstness as mediated through both the aural tones of the piece and the interpretive context or contexts by which

¹¹⁹ CP 1.302-3.

¹²⁰ CP 1.356, 1.329.

¹²¹ CP 1.328.

¹²² Rosenthal, Sandra B. *Charles S. Peirce’s Pragmatic Pluralism*. Albany: NY: SUNY Press, 1994, p. 108.

¹²³ Robert Corrington makes much of this type of Firstness in his definition of *nature naturing*, which is the ejective ground of creation in nature, a ground from which we, who are part of what Corrington calls *nature natured*, are separated by an ontological abyss. Corrington’s *naturing/natured* distinction will be discussed in relation to nested continua in Chapter Four.

understands what one is hearing *as* music. Firstness of this kind can be associated with conditions of *potentiality* (rather than the pure possibility of absolute Firstness) that are conditioned by whichever interpretive contexts surround the perception of quality. Regarding one's phenomenal experience of such Firstness, Peirce gave the names "phaneron" and "quale-consciousness."¹²⁴ Logically, mediate Firstness can be prescinded from the object through which it is perceived, as "green" may be abstracted from the observation of some specifically green tree. Yet since it is an exercise of conscious thought, the irreducible quality of "green-ness" on that tree is still mediate rather than absolute, lacking in spontaneity and mediated by the logical process through which it was abstracted from its object.

Secondness applies to the objects one runs up against in lived experience, objects which are distinct from one another and from the person perceiving them, yet are indubitably real and must be dealt with. Secondness is synonymous with existence, and also with discontinuity. As Peirce put it:

The second category...is the element of struggle....By struggle I must explain that I mean mutual action between two things regardless of any sort of third or medium, and in particular regardless of any law of action.¹²⁵

Insofar as nested continua serves as a model of overcoming problems of interpretation, one may understand the marking of anything on its graph as a response to some form of encounter with Secondness, which is to say some experience of discontinuity among things that calls for their being brought into the

¹²⁴ Respectively in *CP* 1.320 and *CP* 6.222. To be precise, "phaneron" refers to whatever is immediately present in experience at a given moment, and technically involves all three categories. In its sense of immediacy and spontaneity, however, it fits into the sense of mediate Firstness given above.

¹²⁵ *CP* 1.322.

appropriate relation. The initial step for using the model is to mark that which is experienced as discontinuous as separate markings (on the understanding that the points can be erased and re-drawn as circles if necessary), and then to draw a circle around these points that is hypothesized to render them mutually intelligible as an interpretive context. Moreover, although the relative degrees of Firstness and Thirdness in markings/circles will vary, depending on whether these drawn are nearer or further from the center (to reflect the relative intensity of feeling/pervasiveness of intelligibility in objects as they are experienced), these markings/circles are to be understood as manifestations of Secondness regardless of placement. To posit some relative degree of Secondness would have the effect of subjecting it to Thirdness, which would negate its brute actuality.¹²⁶ For example, when rendered *explicitly* on the graph, a high-level interpretive framework such as “time” actually exists to the same extent, and in the same way, as a relatively determinate interpretive framework such as, say, “origami,” though it will be true that “time” is far less often an object of interpretation and more often an implicit framework for the interpretation of other things. The fluidity by which one can

¹²⁶ The upshot of drawing such a circle is to establish some context with respect to which opposing things, mutually discontinuous, may both be understood as continuous. Peirce distinguished between genuine and degenerate Secondness, in which degenerate Secondness characterizes existent things that are superficially linked and generally indifferent to one another—e.g. a fish and a bicycle are mediated in Thirdness by way of the category “carbon-based entities,” but this relation is not particularly illuminating in understanding the import of either “fish” or “bicycle—whereas genuine Secondness is characterized directly by *opposition*—e.g. John McCain and Barack Obama with respect to the category “2008 American presidential election.” Without denying the utility of degenerate Secondness in drawing circles around discontinuous markings on the graph, the aim of the model might be understood as the application of Thirdness to seek the context in which Secondness among discontinuous things is truly genuine, which is the first step toward understanding how to respond to the struggle.

move between understanding something as Secondness or Thirdness—represented as a circle—is of the nested continua model’s most important features.

Thirdness, as “relational generality,” is an interpretative framework that is both internally continuous and continuous with respect to that which it renders intelligible. In algebraic form, Thirdness is the “C” that provides at once the context and the rule of reasoning that links the discontinuous markings “A” and “B.”¹²⁷ Represented on the graph as a circle (which also has its own Secondness), Thirdness functions as a rule of reasoning by which that which the circle contains may be evaluated. It is also enacted whenever some implicit rule of reasoning causes one to draw a particular circle in the first place, so there is always some fundamental Thirdness, like Firstness, that escapes being rendered on the graph. Thirdness, as an interpretive framework, is also the category to be associated with some *purpose* for its objects being mediated according to its guidelines. As Peirce put it, “law is par excellence the thing that wants a reason,” understood in that a law is what brings discontinuous objects into some kind of intelligible regularity.¹²⁸ For the nested continua model, the reasons for a circle’s being drawn reflect its relationship with the objects it contains (whether these be rendered as circles or discontinuous points); as Peirce put it, such objects “do not need reasons: they are reasons.”¹²⁹ One of the insights of understanding nested continua in terms of concentric circles is that a given circle has the potential to be simultaneously justified through more

¹²⁷ CP 6.190.

¹²⁸ CP 6.12. This thesis generally will avoid describing Thirdness in terms of laws, preferring instead Peirce’s own sense of laws as habits, since there is always the possibility that regularity can be disrupted by chance.

¹²⁹ CP 4.36.

determinate objects as reasons for its existence *and also* itself serve as a reason for a vague continuum that surrounds it. A given circle, though possessed of its own norms and responsible to the objects within its contexts, is thus also part of a larger constellation of norms that one may attempt to make explicit—or not—as the interpretive situation demands.

The sense in which a given circle on the nested continua graph may be understood in terms of both Secondness and Thirdness touches upon an important question regarding the nature of empiricism, which was discussed above in terms of the Existential Graphs. This is: is it possible for some determinate thing to serve as both an object of interpretation (Secondness) and at the same time the framework through which other interpretations arise (Thirdness)? The presumption of the nested continua model is that anything drawn upon its graph exists and is in some sense irreducible, and that the character of existing applies not only to low-level objects such as whatever is within one's immediate sensory reach, but also to vast and abstract entities such as "time" and "history," which are immeasurably more vague, and which provide one's interpretations with some of their deepest, most implicit guidelines. So how is it possible, for example, for one to draw the two determinate things "English language" and "toothbrush" as separate-yet-related nested continua, with the circle "English language" containing the circle "toothbrush," when English is required, not only to identify the toothbrush *as* a toothbrush, but also as the implicit framework for one to identify "English language" itself as an object to be drawn? This comes back to the question that Peirce raised

as to how synthetic judgments are possible at all; Peirce got at the heart of the matter in an amazing passage that bears quoting at length (emphasis added):

[We] can know nothing except what we *directly* experience. So all that we can anyway know relates to experience. All the creations of our mind are but patchworks from experience. So that all our ideas are but ideas of real or transposed experiences. A word can mean nothing except the idea it calls up. So that we cannot even *talk* about anything but a knowable object...The Unknowable is a nominalistic heresy. The nominalists in giving their adherence to that doctrine which is really held by all philosophers of all stripes, namely, that experience is all we know, understand experience in their nominalistic sense as the mere first impressions of sense. These "first impressions of sense" are hypothetical creations of nominalistic metaphysics...*By experience must be understood the entire mental product, experience to sense-perceptions...*Hallucinations, delusions, superstitious imaginations, and fallacies of all kinds are experiences, but experiences misunderstood; while to say that all our knowledge relates merely to sense perception is to say that we can know nothing — not even mistakenly — about higher matters, as honor, aspirations, and love.¹³⁰

Much of what is drawn on the nested continua graph was, up until its being drawn, in the mind as an implicit habit of reasoning, and while in this state it *may not* have been said to *exist* (Secondness)—although the likelihood is that it did exist, since this is likely how it entered the mind in the first place and, in ceasing to be a conscious object of thought, became a habit by which other objects of thought were interpreted—there is no reason to doubt that it was *real*.¹³¹ Upon being drawn, the object to which a marking/circle refers is hypothesized to exist/have existed/will exist, and while it cannot, in its capacity as conscious object of thought (signified by the marking/circle) continue to implicitly guide interpretations *exclusively*, this is by

¹³⁰ CP 6.492.

¹³¹ As the next chapter will discuss, one of the great benefits of historiography is to identify real general frameworks that guided the interpretations of people in a given past time period, of which those who lived in that time were not consciously aware.

no means to say that its capacity for Thirdness ceases abruptly upon its being identified in its Secondness. Robert C. Neville has put this very well:

Peirce must...receive credit for developing an empirical alternative to the empiricism he criticized; namely, an alternative conception of the meaning of "possession" of empirical contents...[Peirce saw that] empirical content is not something we possess by looking at it. Rather, it is possessed, he suggested, by influencing or shaping our activity; whether the mental content is an abstract meaning or a brute part of the world immediately encountered, its reality is possessed by experience in precisely the ways in which it makes a difference to activity.¹³²

By becoming explicit through its being drawn, the object has now become something whose capacity for guiding interpretations can be scrutinized in relation to other things, and which provides, if not the guarantee, at least the *possibility* for something genuinely new to enter into conscious awareness in relation to it. This goes along with Peirce's claim that "the clue...consists in making our thought diagrammatic," and that "no progress can be made, until a mark will stay for a little while."¹³³ Whether the object in question is a toothbrush or temporal continuity, the logical structure by which one gleans insights from these things is the same, and Peirce's categories provide a highly serviceable vocabulary for distinguishing the modes of being for a given object without having to separate epistemology and ontology as discontinuous disciplines.

Peirce's three categories are among the most profound features of his thought, and the terms Firstness, Secondness, and Thirdness will appear repeatedly in this text. Yet there is a kind of infinitely looping reflexivity to these categories

¹³² Neville, Robert C. *Recovery of the Measure: Interpretation and Nature*. Albany, NY: SUNY Press, p. 265.

¹³³ CP 6.204.

that can verge on obsession (Richard Rorty once described Peirce as a “whacked-out triadomaniac”).¹³⁴ Experts on Peirce’s categories might argue that the distinct modality of each category has been conflated or otherwise misread. Given the importance of the categories both for Peirce’s thought and as a resource for the nested continua model, a considerable amount of detail is required to explain how one might hope to avoid this charge. Recalling that the graph’s center represents absolute Firstness, and the space beyond its outermost circle absolute Thirdness, the simplest way to express the modalities of being for everything to be drawn on the graph is as permeated by relative mixtures of degenerate and genuine Secondness, mediate Firstness, and degenerate Thirdness.¹³⁵ Put in other terms, the

¹³⁴ Rorty, Richard. “The Pragmatist’s Progress” in Umberto Eco’s *Interpretation and Overinterpretation*. Ed. Stefan Collini. New York: Cambridge University Press, 1992, p. 89.

¹³⁵ Explaining the precise meaning of “mediate Firstness” and “degenerate Thirdness” demands a technical discussion of subdivisions within Peirce’s categories. There are three relevant points.

- (1) Peirce distinguished between two types of degenerate Thirdness and one type of degenerate Secondness, and what this thesis calls “mediate Firstness” (a term which may appear to be an oxymoron considering that Firstness is *immediate* by definition, but is used merely in the sense that, as existent, Firstness-as-quality is only experienced as mediated through existent objects) would have likely been considered by Peirce to be the second type of degenerate Thirdness. As Peirce put it: “Among thirds, there are two degrees of degeneracy...A pin fastens two things together by sticking through one and also through the other: either might be annihilated, and the pin would continue to stick through the one which remained. A mixture brings its ingredients together by containing each. We may term these accidental thirds. [In the terms of the nested continua model, this is one type of what is called “degenerate Thirdness.”]...We now come to thirds degenerate in the second degree...[which] serve to bring out the resemblance between forms whose similarity might otherwise escape attention, or not be duly appreciated. In portraiture, photographs mediate between the original and the likeness. In science, a diagram or analogue of the observed fact leads on to a further analogy” (*CP* 1.366-367). Insofar as quality renders some set of objects intelligible, this is what the model calls “mediate Firstness.”
- (2) In terms of how an interpreter *experiences* such Firstness, however, mediate Firstness on the model is to be understood by way of what Peirce called *quale*-consciousness (*CP* 6.222-237). A quale is the minimal unit of perception, almost indistinguishable to feeling and closely associated with aesthetics. The nested continua model understands quale-consciousness, which is characterized by a high degree of unity, along lines given by Sandra B. Rosenthal in the following

graph's markings represent existent objects that are encountered by way of their existent qualities, and these markings have the capacity to serve as an existent normative rule of interpretation. The repetition of the adjective "existent" is done to underscore the point that nothing is to be rendered on the graph that is not at least presumed to refer to something that actually exists, and so the relative categorial mixtures regarding the graph's markings/circles are meant to correspond to such mixtures as real experiential objects. As existence is of exclusively the character of Secondness, a special effort is required to establish how Firstness and Thirdness may be present on the graph at all.

In Joseph L. Esposito's *Evolutionary Metaphysics*, one finds two particular passages that help a great deal in understanding how mediate Firstness and

passage: "What is given as the percept interpreted in the perceptual judgment in its narrow sense is not a 'collection' of atomic qualia but a gestalt or relation of qualia...Rather, the recognized content is a unitary percept of 'feeling tone,' which, Peirce holds, has its own distinctive quale; a unitary quale or experienced content which is analyzed rather than synthesized in the process of recognition" (*Charles Peirce's Pragmatic Pluralism*, p. 100).

- (3) This thesis denies much of Peirce's distinction between his definition of the first type of degenerate Thirdness (as mentioned in the first point above) and what he calls genuine Thirdness, positing instead a continuum of relative degeneracy and genuineness depending on the context and opposing this continuum to an "absolute" Thirdness that no existent Thirdness can achieve. Peirce describes what he calls genuine Thirdness in the following terms: "Nature herself often supplies the place of the intention of a rational agent in making a Thirdness genuine ...But how does nature do this? By virtue of an intelligible law according to which she acts. If two forces are combined according to the parallelogram of forces, their resultant is a real third" (*CP* 1.366). In terms of the nested continua model, such Thirdness remains in some sense degenerate with respect to the graph as a whole, though it may be genuine regarding the norms of a given framework of interpretation—e.g. with respect to the norms of the context "football game," the intelligible purposiveness of "football team" constitutes genuine Thirdness; with respect to the norms of the context "alpine skiing," it does not. As such, the model draws instead from the following point by Peirce: "No triad which does not involve generality, that is, the assertion of which does not imply something concerning *every possible* object of some description can be a genuine triad" (*CP* 1.476), as well as his understanding of the laws of physics in terms of habit (*CP* 6.23).

degenerate Thirdness are to be understood on a graph of the nested continua model.

The first stems from Esposito's recognition that absolute Firstness and absolute

Thirdness cannot be explained:

Absolute...indeterminacy cannot...be explained, and in conjunction with this, neither can absolute chance—for to explain it is to deny it. [These are what nested continua calls "absolute Firstness."] On the other hand, absolute generality and lawfulness [what nested continua calls "absolute Thirdness"] also cannot be explained, for...to do so implies the use of law and generality and the violation that the *explanans* be more general than the *explanandum*. What must be explained are circumstances involving mixtures of particularity and generality, chance and lawfulness, in relation to other mixtures of particularity and generality or in relation to the pure categories.¹³⁶

Explaining "mixtures of particularity and generality, chance and lawfulness, in relation to other mixtures of particularity and generality" and "in relation to the pure categories" is precisely what the nested continua model aims to do, as it holds that Firstness as pure feeling and Thirdness as pure understanding intersect across various orders of existence, and locating, however hypothetically, the relative positions of these orders in relation to the unknowable absolutes constitutes wisdom. As to how these intersections are characterized in terms of the categories, Esposito discusses Peirce's 1896 paper, "The Logic of Mathematics; An Attempt to Develop My Categories From Within," in which Peirce recognized that each of the three categories may *themselves* be subdivided according to the same three categories. As Esposito puts it:

Each category itself...is capable of taking on each of the three categorial dimensions, generating the following list: monad as monad (abstract quality), monad as dyad (existent quality), monad as triad (general quality), dyad as monad (possible relation), dyad as dyad (existent relation), dyad as triad

¹³⁶ Esposito, *Evolutionary Metaphysics*, p. 167.

(general relation), triad as monad (formal mediation), triad as dyad (existent mediation), triad as triad (general mediation).¹³⁷

Although this list should perhaps not be taken as exhaustive with regard to Peirce's various iterations of the three categories (and his far more complex *semiotic* expressions of the categories), these nine divisions do exhaust the possibilities of the nested continua model; in fact, they exceed it. The absolute poles of Thirdness and Firstness respectively represent general mediation and abstract quality, which cannot be rendered; as for the remaining two subdivisions, formal mediation cannot be graphed on the nested continua model, and general quality *can* be graphed, but only if understood in terms of the description for the second type of degenerate Thirdness given in the first point of the footnote above, as well as the sense in which, as metaphorical, *the graph itself* functions as general quality relative to the person interpreting it.

Much of the difficulty in describing the roles of the categories on the nested continua model lies in the fact that to describe these roles *verbally* is to employ a fundamentally different form of signification than that of a visual diagram of concentric circles.¹³⁸ One of the greatest virtues of harnessing Peirce's categories to a diagrammatic hermeneutics is its ability to simultaneously distinguish that which in lived experience is indistinct and also combine within the same marking modes of being that would otherwise take many pages to parse. For example, a given circle

¹³⁷ Esposito, *Evolutionary Metaphysics*, p. 186.

¹³⁸ Recalling that the model is to be understood as essentially metaphorical, spatial descriptions of continua as imagined on the graph, such as, say, the "underside" of a continuum, or the difference between an interpretive framework as "translucent" or "opaque" will come to feature more prominently in the text.

on the graph may at different moments be characterized as vague, general, individual, existent, intelligible, and bearer of normative value, depending on the situation (while remaining constant in its presumed reality, existence, continuity, and possession of at least *some* degree of vagueness, generality, and intelligibility), which as experienced is unlikely to bear all of these predicates at once. Conversely, continuous interpretive frameworks that are experienced *together* may, on the model, be delineated as distinct continua and examined according to the unique norms of each in order to help determine whether one is applying appropriate or inappropriate contexts of interpretation. In discussing Firstness, Secondness, and Thirdness as they appear subsequently in this text, it will help to bear in mind that any circle drawn on the nested continua model is permeated by the following: its existence in relation to whatever else is on the graph as well as to the graph user (Secondness), its possession of a normative value unlike any other, which is apprehended by way of qualities and characterized by a surplus of potentiality over actuality (Firstness), and the manifestation of its normativity as a rule of reasoning that renders other objects intelligible, and by which one's interpretations might be judged within a given context (Thirdness).

Abduction

Abduction is the logic of hypothesis. Having moved beyond the intensive study of the propositional form of logic that attended his early Kantian period to that of the syllogism upon his encounter with scholastic philosophy, Peirce devoted considerable energies in the late 1860's toward the formal articulation of the logic of hypothesis as its own syllogistic form alongside induction and deduction. Called

“retroduction” in his “New List” of 1867, *abduction* is a term that Peirce introduced in November of 1867, and he described it as a form of syllogism employed by Aristotle as “when it is evident that the first term is predicable of the middle, but that the middle is predicable of the last is inevident, but is as credible or more so than the conclusion.”¹³⁹ Despite the technical language, it is clear that, even at this early stage, Peirce conceived of abduction as a means of guessing (“that the middle is predicable of the last is inevident”), and that guessing had a tendency to be proven accurate frequently, if not with complete regularity (“is as credible or more so than the conclusion”). Much later, in his “Logical Goodness” from 1902, Peirce would put the matter more simply: “abduction consists in studying facts and devising a theory to explain them.”¹⁴⁰ One of the most consistent aspects of Peirce’s career, his faith in the logic of hypothesis bore on aspects of his logic, pragmatic philosophy, and synechistic metaphysics, and was captured in one of his most stirring epigrams:

[If] in order to learn you must desire to learn, and in so desiring not be satisfied with what you already incline to think, there follows one corollary which itself deserves to be inscribed upon every wall of the city of philosophy: do not block the way of inquiry.¹⁴¹

As Peirce saw it, unlike practitioners of “seminary philosophy,” scientists formed the intellectual community most explicitly dedicated to abductive reasoning in order to both reflect back and synthesize data and also use that synthesized data to push outward into the unknown.¹⁴²

¹³⁹ *W* 2, p. 108.

¹⁴⁰ *CP* 5.145.

¹⁴¹ *CP* 1.135.

¹⁴² *CP* 1.32-34.

Peirce explained the link between abduction and knowledge in relation to the other syllogistic forms in saying that “deduction proves that something *must* be. Induction shows that something *actually is*. Abduction suggests that something *may* be.”¹⁴³ In terms of its expression as a syllogism, Peirce gave the example of the different forms of knowledge one might gain from observing white beans from a bag:

DEDUCTION

Rule: All the beans from this bag are white.
Case: These beans are from this bag.
∴ Result: These beans are white.

INDUCTION

Case: These beans are from this bag.
Result: These beans are white.
∴ Rule: All the beans from this bag are white.

ABDUCTION [retroduction or HYPOTHESIS]

Rule: All the beans from this bag are white.
Result: These beans are white.
∴ Case: These beans are from this bag.¹⁴⁴

Given a rule and a result, one makes an explanatory guess—an abduction—for a case as one out of a range of possible guesses for that case. The guess can then be inductively tested through empirical research or deductively extended to other contexts, but what is crucial is that, in moving from a case under investigation to a hypothesized rule that explains that case, abduction allows for further inquiry to seek ever more penetrating rules to explain phenomena in a way that does not block inquiry. Peirce did not insist that all abductions should necessarily be *correct*, and indeed, abduction is the logical form most vulnerable to error; it is, however the

¹⁴³ CP 5.171.

¹⁴⁴ CP 2.623.

form most generative of novel insights, and its accuracy is reinforced subsequently through further testing.

As Peirce came in the later 1880's and 1890's to speculate upon metaphysical and cosmological questions more openly, he came to understand abduction in terms of the mind's continuity with the world. Peirce expresses such engagement in rather poetic terms as follows:

I see an azalea in full bloom. No, no! I do not see that; though that is the only way I can describe what I see. *That* is a proposition, a sentence, a fact; but what I perceive is not proposition, sentence, fact, but only an image, which I make intelligible in part by means of a statement of fact....I perform an abduction when I so much as express in a sentence anything I see. The truth is that the whole fabric of our knowledge is one matted felt of pure hypothesis confirmed and refined by abduction.¹⁴⁵

For Peirce, hypothetical reasoning was an indispensable element in perception, part of an involuntary process of guessing at the reality of the world around us. In substituting, "for a complicated tangle of predicates attached to one subject, a single conception," such reasoning *regulates* one's logical investigations, but it does not preclude our speculating according to other possible modes of explanation.

Abduction stands as one of Peirce's most lasting innovations, and factors into the nested continua model's use in the sense that one is free to playfully draw and erase various markings/circles at will in the hope of generating some novel insights. To be sure, deduction and induction play significant roles on the model, as well. For instance, there are some circles that, upon being made explicit, logically *must* apply to that which they contain—e.g. if a circle is drawn referring to "a week," with seven markings given within referring to the days of the week, this circle must contain

¹⁴⁵ MS 692.

those days (as opposed to “Wednesday” being drawn as a circle and containing “this week” as a marking within it), for a duration of seven days constitutes part of the definition of the term “week.” This is deductive reasoning. Moreover, once a continuous circle has been drawn, the objects it contains may be rendered as cardinally related markings (not circles) that serve as the basis for inductive investigations into similar objects that might potentially fit within the same circle. As a model for theological interpretation inspired by Peirce’s logic, however, abduction is the type of logic that is most of interest. For in encountering a problem of interpretation and drawing a circle around it as the hypothesized appropriate context for the problem, one is essentially *guessing* that it is the correct context, a guess that may prove incorrect. Should that circle appear to render the data intelligible in such a way that comes to exclude, marginalize, or otherwise fail to properly uncover the problem *both with respect to that which it renders intelligible and in relation to other continua on the graph*, it can be erased in favor of another guess. The sense in which abduction synthesizes inductive cases to guess at a novel rule of explanation, as Rosenthal puts it, “throws us outward onto the universe” and speaks to the dual awareness of the relation of a continuum toward that which is within it and the other continua on the graph.¹⁴⁶

Vagueness and generality

Although traceable in its origins to Peirce’s work on the logic of relations from the early 1870’s, vagueness as a distinct logical term did not appear in Peirce’s writings until quite late in his life, and may be most associated with his late-period

¹⁴⁶ Rosenthal, *Charles S. Peirce’s Pragmatic Pluralism*, p. 103.

(post-1905) pragmatism. Far from being the pejorative that most people associate with the word, vagueness for Peirce was a logical form that allows a given term to be specified in an indefinite number of ways without exhausting its meaning. Peirce distinguished vagueness from generality in 1905, in a passage that bears quoting at length:

Logicians have too much neglected the study of *vagueness*, not suspecting the important part it plays in mathematical thought. It is the antithetical analogue of generality. A sign is objectively *general*, in so far as, leaving its effective interpretation indeterminate, it surrenders to the interpreter the right of completing the determination for himself...A sign is objectively *vague*, in so far as, leaving its interpretation more or less indeterminate, it reserves for some other possible sign or experience the function of completing the determination...The *general* might be defined as that to which the principle of excluded middle does not apply. A triangle in general is not isosceles nor equilateral; nor is a triangle in general scalene. The *vague* might be defined as that to which the principle of contradiction does not apply. For it is false neither that an animal (in a vague sense) is male, nor that an animal is female.¹⁴⁷

It is important to recognize that although Peirce saw generality and vagueness as “antithetical analogues,” they are not mutually exclusive according to nested continua, about which more will be said momentarily. Vagueness is to be distinguished from generality in its lack of the principle of non-contradiction with regard to the further determination of some vague term—the case of Schrödinger’s cat as both alive and dead is such an example of logical vagueness.¹⁴⁸ More

¹⁴⁷ CP 5.505.

¹⁴⁸ In 1935, the Austrian physicist Erwin Schrödinger (1887-1961) devised a thought experiment to illustrate quantum entanglement by which a cat is imagined to be placed in a box that contains an atom whose process of decay will unleash a poison that kills the cat. Yet though at any moment the opening of the box would reveal a cat *either* alive *or* dead, from the objective indeterminacy of the atom’s decay—its logical vagueness—it follows that, so long as the box is closed, the cat is both alive *and* dead. Incidentally, John Polkinghorne’s compilation of essays on the theory of quantum entanglement and Trinitarian doctrine, *The Trinity and an Entangled World: Relationality in Physical*

important, however, is the question of whether the agent of further specification of a term is an interpreter of that term (generality) or is understood to objectively reside in that term or some term that is caused by it instead (vagueness). Neither vagueness nor generality is incompatible with metaphysical realism.

How does the vagueness/generality distinction bear on the nested continua model? To address this question, it helps to discuss the contents of the graph in relation to the person who interprets it. Someone viewing the graph will understand any circle drawn upon it as vague, not only with respect to relatively more specific counterparts that are the markings/circles drawn within it, but also because there is always the possibility that to some *other* interpreter of the graph, such a circle may disclose novel understandings with respect to this new context of interpretation. Vagueness in this sense resembles Ochs's notion of textual implicature. Yet there is a second sense of vagueness in terms of the model, one which stems from the understanding that the graph user may understand him or herself as *also* a distinct circle on the graph, one that is to be labeled "willful awareness" and drawn as close as possible to its absolute center. From the point of view of awareness as this innermost existent circle, anything to be drawn around it (which is everything) is in some sense objectively vague, with relative *ranges* of vagueness increasing in proportion to the distance from the innermost circle. Time, for example, is of a higher order of vagueness than history, as it has a greater range of possible specifications. Imagining one's awareness as facing outward from the

Science and Theology (Grand Rapids, MI: Eerdmans, 2010), makes reference to Peirce's logic of vagueness.

graph's center toward the furthest imaginative horizons, the closer are the interpretive frameworks—i.e. circles drawn more closely to the center—the less vague they are, a point that is aided by Neville's understanding of vagueness as "tolerance of ambiguity, confusion, and contradiction among the less abstract notions that might specify the vague ideas."¹⁴⁹ The sense in which one's own awareness can also be located at a specific point on the graph will be developed further later in this chapter, as well as in Chapter Four's discussion of one's own experience in relation to the divine.

Ordinal and cardinal number

Peirce's encounter with the theory of ordinal and cardinal number came about during his years as an instructor at Johns Hopkins between 1879 and 1884, and was developed in conjunction with his reception of a paper from Alfred Kempe on iconic logic.¹⁵⁰ Peirce was also stimulated by the projective geometry of Arthur Cayley and the set theory of Georg Cantor (who had introduced his theory in 1883), both of which were major sources for what would become his metaphysics of synechism.¹⁵¹ Having already discussed the iconic logic of Peirce's Existential Graphs, ordinal and cardinal number bear mentioning because of their assistance in understanding the nature of the relationships among continua as rendered on the nested continua graph. Proceeding on the understanding that cardinal number

¹⁴⁹ Neville, Robert C. *Eternity and Time's Flow*. Albany, NY: SUNY Press, 1993, p. 9.

¹⁵⁰ Murray Murphey has argued that the discovery of the mathematics of set theory and continua during this time represents one of the three most important breakthroughs in Peirce's career, the others being his initial encounter with Kant, transition from propositional to syllogistic logic, and development of the logic of relations (Murphey, *The Development of Peirce's Philosophy*, p. 3).

¹⁵¹ *Ibid.* p. 240.

represents potentially infinite collections of discrete numerals—e.g. 1,2,3, etc—and ordinal number represents potentially infinite sequence of orders, each of which contains its own infinite set of cardinal numbers—e.g. first, second, third, etc—it is possible to gain some sense of how the circles on the nested continua model interact.¹⁵² Simply put, as drawn on the nested continua graph, everything is determinate to a degree, but drawing a circle around another circle just means that it is *less* determinate than the circle it now contains, and *more* determinate than a circle that might be drawn around it; these are related *ordinally*. As such, the only relevant statements that can be made about the ordinal positions of circles on the graph are the designations of “closer to the center” and “further from the center.” Yet within each order, there can be an infinite collection of determinate entities that are discontinuous with respect to each other. These are related *cardinally*. For example, the terms “British history” and “history in general” represent continuous interpretive frameworks—as such, to be drawn on the graph as concentric circles—that are related *ordinally*. There is no fact of British history that is not also a fact of history in general. Yet within each of these orders there is a potentially inexhaustible series of facts—e.g. “the battle of Hastings took place in 1066” for the former, “Hirohito was emperor of Japan during the Second World War” for the latter—that are related *cardinally*.

¹⁵² For an intensive approach to Peirce and mathematics, see *Studies in the Scientific and Mathematical Philosophy of Charles S. Peirce: Essays by Carolyn Eisele* (Eisele, Carolyn. The Hague: Mouton, 1979); for an extensive approach, see Hilary Putnam’s *Mathematics, Matter, and Method* (Putnam, Hilary. Cambridge: Cambridge University Press, 1975).

There are three further points that speak to the richness of applying Peirce's particular understanding of the cardinal/ordinal numerical distinction to nested continua. The first bears on the relation between infinitesimals and continua—a continuum represents a certain order, and the facts that it explains are its cardinal counterparts; discontinuities among continua are located at infinitesimal points of emergence—though it is perhaps best to postpone discussing this feature, as it will be given treatment in its own section below. The second point is expressed well by Murray Murphey in comparing Cantor's understanding to that of Peirce:

Peirce's theory of ordinals gives us a sequence of classes instead of Cantor's classes of sequences. This fact is evident...from the fact that Peirce always designates places *in* a simple sparse sequence.¹⁵³

Understanding ordinals in terms of a "simple sparse sequence" captures precisely what it means for the nested continua model to limit itself strictly to what *any one interpreter or group of interpreters at any one time might be interpreting*, and when one considers the geometry of concentric circles, it is clear that there is really no other possibility for ordinality in such a form. For though the orders drawn might shift depending on the identity of the person using the graph (as discussed above with regard to vagueness and textual implicature), and though the continua necessary to be made explicit will themselves differ, in any one situation for any one identity, a simple sparse sequence of continua, ordinally related around a single center, is appropriate. The sparse simple sequence that will be discussed at greatest length in this thesis will be that of "person," "faith tradition," "history," "time," and

¹⁵³ Murphey, *The Development of Peirce's Philosophy*, p. 247. (Citation from Peirce found in CP 4.337.) Georg Cantor (1845-1918), along with Richard Dedekind, is considered the founder of set theory, the branch of mathematics that studies sets as collections of objects.

“eternity” as orders of nested continua. The third point applies to the logic that Peirce employed to define relations among ordinal numbers. As Murphey put it:

In order to define the ordinal numbers, Peirce introduces an operation...[that] consists in converting a predicate of a subject into a subject, or, more exactly, instead of using a predicate, P, as a way of thinking about something, as when we say that “X is P,” we rather make P the subject of thought and predicate other characters of it, as when we say that “P is a color.”¹⁵⁴

The logic on display is that of *prescision*, a technique of abstractive reasoning to which analysis presently turns.

Prescise and habit-conditioned reasoning

Peirce’s understanding of the logic of *prescision* came about in the 1860’s as a result of his readings of scholastic and classical philosophy, particularly Aristotle. It was also during this time that, following Scotus, Peirce came to distinguish between habitual and actual ideas in cognition. *Prescision* and habit would be revised in light of his discovery of the logic of relations in the 1870’s as well as his move toward metaphysical continuity in the 1890’s, but they remained important features in his thought well into his grandest efforts at system-building around the turn of the twentieth century. With regard to an idea being in the mind as a habit, this is to say that an idea may implicitly guide both one’s interpretations and actions. Peirce wavered through the years in terms of whether habits are upended through irritation (1877’s “Fixation of Belief”) or by the free play of the mind (1908’s “A Neglected Argument for the Reality of God”), but from the point of view of this thesis, neither alternative need settle the question on its own. What remains

¹⁵⁴ Ibid. p. 245.

consistent is that habit characterizes the nature of most of the mind's ideas in a given moment, a point that Robert C. Neville puts well in his book, *The Highroad*

Around Modernism:

You can ask about the system of highest level categories, but not while doubting the continued existence of your chair or the fact that lunch will be ready on time, *and yet* if you do have reason to doubt the continuation of the chair or the availability of lunch, you are not then doubting the passage of time or the working of your biological organism that will make you hungry soon.¹⁵⁵

Peirce likewise captured the distinction between actual and habitual ideas in this passage from the 1860's:

A notion is in the mind *actualiter* when it is actually conceived; it is in the mind *habitualiter* when it can directly produce a conception. It is by virtue of mental association...that things are in the mind *habitualiter*...The mind perceives likenesses and other relations in the objects of sense, and thus just as sense affords sensible images of things, so the intellect affords intelligible images of them.¹⁵⁶

Habits thus perform a vital role in inference, where not only the general ideas that are shaped according to logical rules but *the rules of inference themselves* function as implicit mental habits, a point that featured significantly in Peirce's understanding of genuine versus "paper" doubt (a doubt is genuine when it arises through the disturbance of what had hitherto remained habitual).¹⁵⁷ Significantly, habits also

¹⁵⁵ Neville, Robert C. *The Highroad Around Modernism*. Albany, NY: SUNY Press, 1992, p. 28.

¹⁵⁶ *CP* 8.18.

¹⁵⁷ Peirce's understanding of doubt became an important part of his 1868 attack on Descartes' methodological doubt (which claimed that before inquiry could begin, all ideas must be doubted aside from those that rest upon intuition, a claim that Peirce berated as mere "paper doubts"—*CP* 4.198). The genuine/paper doubt distinction also became a major feature of his classic pragmatic texts, "The Fixation of Belief" and "How to Make Our Ideas Clear," in which Peirce argued that one's ideas remain indubitable until disturbed through lived experience, with the genuine doubt ensuing from the disturbance as the key instigator for inquiries that proceed until the doubt has subsided (*CP* 3.70-373). Finally, with some assistance from Thomas Reid's commonsense philosophy, Peirce's notion of doubt came to feature prominently in his notion of "critical common-sensism" (the claim that the reality of commonsense experiential objects is not to be doubted unless provoked), which

remain open to deviations from a norm, a point that Peirce expressed cosmologically in his *Monist* series of 1891 through 1893, in which he argued that the laws of physics themselves have evolved as operative habits in the universe.¹⁵⁸

Aside from the disturbances of lived experience, the *logical* means by which Peirce held habits to be rendered explicit was *prescision*.¹⁵⁹ *Prescision* is what furnishes one with the means of turning predicates from being signs thought *through* into being subjects thought *of*, much in the way that the statement “be sure show up early for your job interview tomorrow” may be *prescinded* to read “temporality is a quality possessed by you, your job interview, and tomorrow.” In a 1905 paper entitled “Ordinals,” Peirce gave a good description of the connection of this type of logic to ordinal number:

When we say that the Columbia library building is *large*, this remark is a result of *prescisive* abstraction by which the man who makes the remark leaves out of account all the other features of his image of the building, and takes [to represent the size] the word “large” which is entirely unlike that image...[If] this man goes on to remark that the largeness of the building is very impressive, he converts the applicability of that predicate from being a way of thinking about the building to being itself a subject of thought...Abstraction is one of the most constantly employed tools of the mathematician. In thinking of the system of multitudinal quantity, we do not need to think about ordinal quantities, but we do need to attribute, to the objects we are thinking about, ordinal places in a series. The very system of multitudinal quantities themselves consists in their being ordinally arranged.¹⁶⁰

accompanied his turn toward pragmatics as a response to the popularization of James’s and Dewey’s pragmatism (*CP* 5.438-452).

¹⁵⁸ *CP* 6.23.

¹⁵⁹ Peirce sometimes referred to this type of reasoning as “hypostatic abstraction” (*CP* 5.449).

¹⁶⁰ *CP* 4.332. In this paper Peirce also distinguished between what he called “subjectival” and “prescisive” abstraction, though this distinction need not concern us here.

In terms of habitual and abstractive reasoning in relation to the nested continua model, the transformation of habit into conscious awareness by way of precision is simply the drawing of a circle on the graph where empty space before, and the application of precision to the graph is to find some quality the object to which the circle refers possesses and then draw *another* marking/circle representing that quality. The second circle will typically be drawn around the first, though it need not be. For example, the quality of “expensive” in a circle referring to “New York City” can be precised into “places that are expensive” as a second circle, of which “New York City” is only one specification, cardinally related to other places that are expensive. On the other hand, “expensive” can be drawn as a discrete marking *within* “New York City” and cardinally related to other qualities possessed by New York City, e.g. “exciting,” “crowded,” etc. If need be, the discrete marking “expensive” drawn within the circle “New York City” can be drawn as a circle of its own, with any markings within it referring to “things that are expensive in New York City.” In addition to its role in rendering qualities, precision is a means by which modal verbs may be rendered on the graph—as mentioned above, “be sure to show up early for your job interview” can be precised by way of “temporality,” and “show up” precised relative to “job interview” or various other interpretive categories. Precision is also by no means always a reciprocal process (“it is frequently the case, that, while A cannot be precised from B, B can be precised from A”), and while “expensive” can be precised from “New York City,” “New York City” cannot itself be precised from “expensive.”¹⁶¹ The cooperation of abduction

¹⁶¹ CP 1.549.

and precision (which tends to be deductive) characterizes much of the logical operations of the nested continua model.

Infinitesimals and continua

Peirce's understandings on continua and infinitesimals comprise the core of his metaphysics of synechism, and were introduced in his first *Monist* series of 1891 through 1893.¹⁶² Defined as that tendency of philosophical thought which insists upon the idea of continuity as of prime importance, Peirce held that "synechism is not an ultimate and absolute metaphysical doctrine; it is a regulative principle of logic, prescribing what sort of hypothesis is fit to be entertained and examined."¹⁶³ There is much that could be said about Peirce's theory of continuity, but the reason for its inclusion here is to help explain the following: (1) the means by which the circles on the graph are understood to relate to both each other and the graph's interpreter; (2) the excess of possibility over actuality; (3) infinitesimals as branching points for novel continua; and (4) the anti-substantialist implications of continuity. Peirce described the nature of his metaphysical understanding of continuity well in the following passage, from his paper, "The Logic of the Universe":

This blackboard is a continuum of possible points; a continuum of possible dimensions of quality...if I draw a line of chalk on the board; this discontinuity is one of those brute acts by which alone the original vagueness makes a step toward definiteness; there is a certain element of continuity in this line; where did this continuity come from? It is nothing but the original continuity of the blackboard which makes everything upon it continuous.¹⁶⁴

¹⁶² For a detailed account of the evolution of Peirce's understanding of mathematical continuity in relation to the set theory of Georg Cantor, see Matthew Moore's article, "The Genesis of the Peircean Continuum" (*Transactions of the Charles S. Peirce Society*, 2007, 43, 3).

¹⁶³ CP 6.173

¹⁶⁴ CP 6.203.

As a two-dimensional continuum, a blackboard contains an infinite number of possible points, and to draw a line on it is to bring about an actual series of (non-discrete) points that exists in a specific location as an emergent continuum. As Rosenthal has recognized, the “chalk line can be viewed as discrete or continuous, as present actuality or present possibilities, depending on whether one views the line as a cut in the containing continuum or as a continuous line determining the possibilities of future cuts within itself.”¹⁶⁵ In addition to the sense in which determinate entities are understood to be continuous with respect to themselves and with some framework of interpretation, this surplus of real possibility over actuality is an important feature of continua. As mentioned above, the possible marking/circles to be drawn on the nested continua graph exceed anything that could ever actually be drawn, and the empty space of the graph remains continuous unless otherwise disrupted. Like Peirce’s blackboard example, anything drawn in nested continua is continuous with the graph as a specification of its “original vagueness.” Also, though not reflected visually on the graph, another point is that any discrete markings or circles nested within a larger circle are also understood as continuous with that larger circle (since that which confers intelligibility is continuous to those things it renders intelligible), even if the cardinally arranged markings are discontinuous between themselves.

The point at which possibility becomes actuality is the infinitesimal, which characterizes the emergence of a novel continuum at an infinitesimal point. As Carl

¹⁶⁵ Rosenthal, *Charles S. Peirce’s Pragmatic Pluralism*, p. 119.

Hausman has noted, in terms of infinitesimals, such emergence refers to reactions within a continuum at an infinitesimal point that had, up to that point, had been merely a sheer potentiality.¹⁶⁶ Drawing from his mathematical investigations of Cantor's set theory, Peirce held that only infinitesimals as positively real can uphold both the continuity of existent continua as well and the emergence of novel continua, which is the core of the relationship between synechism and the evolutionary cosmology of the *Monist* series. As he put it:

By thus admitting pure spontaneity or life as a character of the universe, acting always and everywhere though restrained within narrow bounds by law, producing infinitesimal departures from law continually, and great ones with infinite infrequency, I account for all the variety and diversity of the universe, in the only sense in which the really *sui generis* and new can be said to be accounted for.¹⁶⁷

Agreeing with Peirce's account, the nested continual model understands infinitesimals to represent those points on the continuous circles that are metaphorically intersected by emanations of chance novelty from the center of the graph (to be discussed further with respect to emergence), which can also be expressed in mathematical terms. Michael Raposa has observed that Peirce held that the power of a given collection (cardinal number) is always exceeded by the power of the collection of all its sub-collections (the order in which an infinite cardinal numbers are contained). Cantor had thought that the power of the collection in relation to all its sub-collections exhausted the range of mathematical possibilities, yet Peirce argued that in fact *there cannot be a greatest possible*

¹⁶⁶ Hausman, Carl R. *Charles S. Peirce's Evolutionary Philosophy*. Cambridge University Press, Cambridge: 1997, p. 186.

¹⁶⁷ *CP* 6.59.

multitude within a given order.¹⁶⁸ Though nested continua are understood to be continuous among each other and in themselves, the point at which they are distinguished—and in which a whole new order of infinity is born—is the infinitesimal. Peirce made his mathematics into the stuff of poetry.

Continua and infinitesimals are not to be understood as substances, regardless of Schelling-influenced terminology of “objective idealism” that appeared in Peirce’s *Monist* series. Rosenthal serves as an astute guide toward understanding why this is the case, attributing confusions in Peirce’s writings of this time to a lack of recognition of process metaphysics:

Because he fails to acknowledge process, Peirce had problems breaking out of traditional distinctions, or fails to adequately utilize novel emerging distinctions; this results in his various attempts to understand his position in terms of the false alternatives based on an historical tradition of substance philosophy and spectator theory of knowledge.¹⁶⁹

It is thus a mistake to conceive of continua as the “stuff” that real entities are made out of, as Peirce is not asking the type of question provided by substance metaphysics. The three categories of Firstness, Secondness, and Thirdness are comprehensive enough with regard to the being of entities so as not to require an additional category of substance to reconcile them. Recalling Neville’s distinction between reductive and non-reductive theories as given in the introduction, understanding all entities as being “really” made out of this or that type of substance would be to reduce those entities to a single overarching framework. Rather, categories of “mind” and “matter” refer to different types of functions or processes

¹⁶⁸ Raposa, *Peirce’s Philosophy of Religion*, p. 41.

¹⁶⁹ Rosenthal, *Charles S. Peirce’s Pragmatic Pluralism*, p. 99.

operative in the universe, which Peirce called a “living, inferential metaboly of symbols.”¹⁷⁰ In this sense, Peirce’s synechism is compatible with process metaphysics, as subsequent discussions of emergence and (especially) Chapter Three’s discussions of Neville’s sense of time and eternity will highlight.

Peirce’s understandings of continuity and infinitesimals stand alongside the Existential Graphs and his three categories as among the most important areas of Peirce’s thought for the nested continua model. As Peirce put it, “space presents points, line, surfaces, and solids, each generated by the motion of a place of lower dimensionality and the limit of a place of next higher dimensionality.”¹⁷¹ This statement, from 1896’s “The Logic of Mathematics,” considered in isolation, may not immediately reveal any particular affinity between Peirce and the present project.

Yet Raposa sheds a great deal of light on the matter in the following passage:

To identify a topological space as continuous is to assume that it either returns to itself or contains its own limits; if it is “unbroken,” it must return to itself; if it has limits, such limits represent a breach of continuity, manifested as “topical singularities” of a lower dimensionality than that of the continuum itself...The relationship between the actual and the possible, both within a given universe and between the actual universe and all other possible worlds, is illustrated in this system by the embedding of one continuum within another of a higher dimensionality.¹⁷²

It is not necessary that all circles and markings on the graph of nested continua be understood in such abstract mathematical terms. Yet it is possible to do so, and on the understanding that dimensions are modes of experience that, as experienced, are blended together, but which may be logically distinguished as different orders, it

¹⁷⁰ CP 5.259.n3.

¹⁷¹ CP 1.501.

¹⁷² Raposa, *Peirce’s Philosophy of Religion*, p. 44-45.

is not difficult to imagine “the embedding of one continuum within another of a higher dimensionality” in terms of concentric circles on a two dimensional graph. To understand what makes these continua *processive*, it helps to call attention to the notion of emergence, which is a term that Peirce himself did not use, but which has become influential in contemporary studies of science and religion and applied to Peirce’s work by Rosenthal.

Emergence

In his 2004 work, *Mind and Emergence*, the philosopher of science Philip Clayton offers a helpful definition of emergence:

[Emergence is] the view that new and unpredictable phenomena are naturally produced by interactions in nature; that these new structures, organisms, and ideas are not reducible to the subsystems on which they depend; and that the newly evolved realities in turn exercise a causal influence on the parts out of which they arose.¹⁷³

Although Clayton sees emergence in terms of complexity/simplicity rather than vagueness/specificity, and his analyses are intended specifically in terms of natural theology and scientific investigations, his understanding of emergence is not only useful for tolerating mutually irreducible continua as understood according to the nested continua model, but because of its tolerance for multiple modes of inquiry, from the empirical to the speculative. As Clayton puts it:

Some levels of reality are ideally suited for mathematical deterministic explanations (macro-physics), others for explanations that are mathematical but not deterministic (quantum physics), and others for explanations that focus on structure, function, and development (the biological sciences from genetics to neurophysiology). But at other levels laws play a more minimal

¹⁷³ Clayton, Philip. *Mind and Emergence: From Quantum to Consciousness*. Oxford: Oxford University Press, 2004, p. vi.

role and idiosyncratic factors predominate... Persons ask questions about the meaningfulness of the natural and social worlds in which they live and move....Without doubt the *questions* rise to a level beyond the social scientific. But does the possibility of discerning better or worse answers keep up with the questions, or do they now outstrip all human capacity for rational evaluation?¹⁷⁴

In this thesis, the answer to Clayton's concluding question is a clear "yes, the possibility of discerning better or worse answers to questions of meaning is real, and no, they do not outstrip all human capacity for rational evaluation." The hope is that Peirce's abductive metaphysics extends rational evaluation to the questions of the natural and social worlds in which we live, a hope that is assisted by combining with Peirce's metaphysics the concept of emergence, which helps in accounting for processive activity among continua.

For all of Peirce's inventiveness in metaphysics, the absence of a positive account of process is a curious oversight, one that, as was seen in discussions of Peirce's proclamations of idealism, led to confusions among his writings on synechism. Yet it is possible to posit emergence as the mode by which potentiality becomes actuality at an infinitesimal point, and the following quotation from Peirce opens onto further speculation:

Yet we must not assume that the qualities arose separate and came into relation afterward. It was just the reverse. The general indefinite potentiality became limited and heterogeneous.¹⁷⁵

Like light passing through an ever shifting kaleidoscope, interpretations may be understood to emanate from the center of absolute Firstness as undifferentiated possibility, pass through any number of intervening continua, and in encountering a

¹⁷⁴ Clayton. *Mind and Emergence*, p. 205.

¹⁷⁵ *CP* 6.199.

brute reaction from some existent continuum, elicit an emergent interpretation as a transition from potentiality to actuality. The process is itself understood to fit within an infinitesimal moment, or what may be called the “temporally thick” present, well described by Peirce in his assertion that “there is no span of present time so short as not to contain...something for the confirmation of which we are waiting.”¹⁷⁶ On the understanding that interpretive processes are objectively active in nature beyond merely human interpretation, one’s own conscious awareness need not always enter into the process of natural interpretation.¹⁷⁷ Yet it is nonetheless possible to place one’s conscious awareness into objective interpretive processes, and as recalled from discussions of vagueness, the interpreter of the graph may imagine him or herself (or rather his or her conscious awareness) as the innermost circle, separated from the center of absolute Firstness by an infinitesimal divide. This is how evolutionary change is understood to occur, and that, through emergence, such change is a constant and ongoing *process*. Also, for the sake of the theological discussion to come in Chapter Four, which speculates on absolute Firstness as creator *ex nihilo* as source of absolute chance and novelty, it is important to distinguish between the locations of the following: (1) emergence as occurring at the reaction of an interpretation off an existent object at an

¹⁷⁶ CP 7.675.

¹⁷⁷ In their article, “Interpretation and the Origin of Life,” Christopher Southgate and Andrew Robinson have argued convincingly on Peircean grounds for the following definition of interpretation: “All interpretations are changes of state which occur for a purpose in responding to something” (*Zygon: Journal of Religion and Science* 45, no. 2, 2010, p. 745-760). If altered slightly to read, “changes of state which occur for a purpose through emergence in responding to something,” this is the basic definition of interpretation employed by this thesis.

infinitesimal potentiality; and (2) pure possibility at the absolute center, from which novel effusions of chance emanate.

Rules for the nested continua model

Studying Peirce is like inhabiting a very intricate, elaborate machine whose instruction manual is printed in multiple languages, with the manual's rules for operation changing as one flips through its pages. In the midst of all the various knobs and levers, one gets a sense that if they could only be operated in the correct way, with all its systems activated at once, then the machine might be made to go places to where no machine has gone before. In this chapter, several aspects of Peirce's thought have been introduced, and the fact that the presentation has unfolded across distinct sub-sections should not obscure the point that just as Peirce felt that the mathematics of set theory bears no incomparable collections, neither were any of his ideas intended for isolation from one another. If, as is likely, the present project takes Peirce's ideas in a direction he would not have wished to go, and if, as is undeniable, several of the best-known "knobs and levers" in his thought have gone unmentioned (e.g. fallibilism, convergence theory of truth, much of his thinking on pragmatism, pragmaticism, and semiotics, some of which will be mentioned in later chapters), one hopes at least that he might respect the fact that those aspects of his thought that *have* been mentioned in this project are intended to be applied together. The intention is similar to that given at the beginning of one of Peirce's unpublished manuscripts from 1907, in which he wrote:

O Creator out of blank nothing of this universe whose immense reality, sublimity and beauty so little thrills me as it should, inspire me with the earnest desire to make this chapter useful to my brethren!¹⁷⁸

The following rules will be presented along a spectrum that ranges broadly from the straightforwardly logical to the speculatively metaphysical. Across different contexts and with respect to different users, all of these rules need not be applied, and it is possible that the earlier rules might remain tenable in the absence of those further down the list. Yet with respect to the remaining chapters of this thesis, in which faith communities, history, and time are to be posited as a sparse simple sequence of successively larger concentric circles on the graph and subsequently analyzed according to whatever theological insights such an arrangement elicits, all of the following rules will be brought to bear.

(1) If faced with some problem or dispute, identify its explicit distinctions. Mark them as discontinuous points on the graph.

- a. If presented with verbalized arguments that, based on these distinctions, favor one or another of that which is distinguished, identify within these arguments any explicit rules of reasoning that are offered as justification for the preference and draw these rules as circles around that which is distinguished (drawn as markings). Seek the *least vague* context (which is to say the context in which the lowest quantity of predicates appears to obtain) in which such rules of reasoning are intelligible with respect to the discontinuous markings

¹⁷⁸ MS 277

and draw it as a second circle around them. Assume that the cause for the problem or dispute is explicable with respect to this context.

- b. If no rules of reasoning are offered, or if no arguments are offered, then assume that the distinctions are implicit and venture hypotheses for possible relevant distinctions, as well as the *least vague* context in which that which is distinguished may be understood together, presuming that the implicit source or sources of the dispute may be found at this level. Render this context as a circle around the markings.
- c. Whether the distinctions are explicit or implicit, understand the circle as an existent rule of interpretation, one that *may or may not* be accurate with respect to the distinctions of the problem or dispute, but nonetheless possessed of certain norms that provide a measure by which to judge that which is distinguished within it. Up to the point in which a circle is explicitly drawn, it is understood to have existed in the mind in the form of a habit for guiding one's actions and interpretations.
- d. Reflect on the norms that are referred to by the drawn circle. Reflecting on the norms of a given circle in this manner involves evaluating the circle with respect to some other, implicit set of norms, which is to say another possible circle. Yet unless the resolution of the dispute appears to call for the direct comparison of multiple sets of norms (see rules 2 and 3), this second set may remain implicit.

Inductively investigate that which is deduced to be of the nature a specific case according to the circle's norms to uncover further cases for comparison.

- e. Whichever of the disputants appears to most closely resemble the optimal norms of a given circle is to be preferred.

(2) If these inductive investigations according to one circle's norms come to feel ineffective with respect to resolving the dispute, or if some novel fact should arise that feels relevant but cannot be rendered intelligible according to the norms of the circle, draw a second circle around the first to represent a *more general* set of norms by which the norms of the first circle may themselves be evaluated or the novel fact accounted for. The larger circle, which is not to be assumed as in any way "better" than its smaller counterpart, is to be understood as characterized by norms that are more general in the sense of rendering intelligible a greater range of predicates than its smaller counterpart. Inductively investigate whether the initial disputants more appropriately belong within both sets of norms, only the norms of the larger circle, different disputants in different sets, or none of these.

(3) If the arguments within the initial dispute appear to operate by way of *multiple* or *competing* rules of interpretation, investigate the relative generalities of each set of rules, and draw as the largest concentric circle whichever set of rules appears to apply to the greatest range of predicates. Inductively investigate whether the disputant points more appropriately

belong within all sets of norms, only the norms of the largest circle, different disputants in different sets, or none of these.

(4) In cases of two circles drawn upon the graph, understand the following rules of relation to apply:

- a. The relations of that which is identified within a given circle are defined cardinally; the relations among circles themselves are defined ordinally.
- b. The rendering of an additional, larger circle around an initial circle may be understood as an act of precision, which is to say a generalization based on some quality possessed by either the initial circle or the common to the disputant objects contained by that circle.
- c. On the presumption of an innumerable sequence of possible orders, two circles may not be *precisely* posited as to their distance between the absolute Firstness at the graph's center and the absolute Thirdness beyond its outermost drawn circle. Yet with respect to one another, two circles may be identified as *relatively* closer or farther from these absolute poles. This is to say that the norms of a circle drawn closer to the center will tend to be characterized by relatively greater intensity of feeling and spontaneity among its contained objects; the norms of a circle drawn further out will tend to be characterized by relatively greater concrete reasonableness and stability *in proportion* to the degree of discontinuity (and often aesthetic intensity) within the smaller circle.

- d. With respect to the smaller circle, the larger circle may be understood with respect to the predicate “renders intelligible,” like a mirror, while the smaller circle may be understood with respect to the predicate “interpreted through,” like a lens.
- e. With respect to the larger circle, the smaller circle is to be understood as relatively specific; with respect to the smaller circle, the larger circle is to be understood as relatively vague.
- f. Although the larger circle is to be posited after the smaller by way of precision, the smaller circle is to be understood as having objectively emerged from it at some subsequent infinitesimal point. Proceeding from smaller to larger, then, is akin to looking out at a set of stars in the night sky and recognizing that, the further distance between a given star and one’s perception of it, the greater is the temporal gap between perceiver and perceived. At the same time, the larger circle also represents a greater range of potential points of future emergence, and so outer continua also represent vague structures of future normativity; the closer one gets toward the center of the graph, the closer one proceeds toward the present.

(5) Should two or more circles need to be compared in some manner beyond the rules given above, which is to say that inquiry has reached a point of impasse surpassing the initial disputants drawn as discontinuous points, erase the original discontinuous points and redraw the circles as discontinuous points within some further hypothesized circle. The original

disputants/discontinuous points are now cardinally arranged within the same order. Seek some context that contains all the discontinuous points, and draw this context as a circle around them. Repeat steps 1-4. With respect to these moves, understand:

- a. Discontinuity is to be presumed as emergent from some potentially encircled continuity, although the more such continuity is rarefied as vague (i.e. of a higher order), the less will it help with respect to the feeling of discontinuity among disputants. In other words, the more discontinuities a given thing tolerates, the more concretely reasonable is its own continuity, and yet also the less it tends to elicit an aesthetic response or function as an effective explanation.
- b. In certain cases, though not all (with the difference to be determined deductively), there may be a reciprocity between a circle and its markings in which a given circle may be redrawn as a point, and a point that had been contained by the erstwhile circle redrawn as a circle around it. For example, the eighteenth and nineteenth centuries may be categories *within* the history of a certain type of Christian theology, and as such from that perspective could be drawn as points within “Christian theology.” At the same time these centuries are relevant with respect to far more than Christian theology, and so “Christian theology” and, say, “colonial competition” or “development of the literary novel” could be drawn as points within “eighteenth century.” Both ordinal relations could be valid, but only one simple

sparse sequence obtains for one person or group of people in one time.

(6) Should you wish to be rendered upon the graph, then draw the smallest possible circle around the center, and understand this circle to represent “my willful awareness.” In making such a move, understand:

- a. Such awareness always faces outward from the center, yet as positioned infinitesimally close to the center of Firstness, “my willful awareness” is often disrupted by its emanations of spontaneous feeling. As Peirce put it, such awareness is “present and living, though specially colored by the immediate feelings of that moment. Personality, so far as it is apprehended in a moment, is immediate self-consciousness....A general idea, living and conscious now, it is already determinative of acts in the future to an extent to which it is not now conscious.”¹⁷⁹
- b. Cognition consists in an ongoing process of selection and valuation among the innumerable frameworks of interpretation that are further out from awareness, selecting whatever context is most appropriate to make sense of a given situation and, in doing so, valuing its norms; as Peirce put it: “We can now see what the affection of one idea by another consists in. It is that the affected idea is attached as a logical predicate to the affecting idea as subject. So when a feeling emerges [from Firstness] into immediate consciousness, it always appears as a

¹⁷⁹ CP 6.155-156.

modification of a more or less general object already in the mind [interacts with existing continua].”¹⁸⁰

- c. Interpretation emanates as undifferentiated from the center of absolute Firstness, passing through “my awareness” and reflecting off/refracted through existent circle(s) of interpretation to become differentiated. One perceives a plurality of qualities by way of the plurality of existent objects.
- d. In itself, the innermost circle as awareness is akin to what Ralph Waldo Emerson described as the “transparent eyeball,” bearing the potential to abjure intelligibility in seeking after the qualitative aspect of experience, yet which is at the mercy of chance as to whether such a qualitative aspect will be directly perceived.¹⁸¹ To the extent that objects of perception are willfully interpreted, this potential is renounced, even with respect to the most determinate objects of perception; as Peirce put it, “when I say to myself that the stove is black, I am making a little theory to account for the look of it.”¹⁸² Rosenthal states the matter in rather more technical terms, yet captures its meaning well, as follows: “primordial processive activity can be philosophically reflected upon through interpretive description, such interpretive description can be used philosophically

¹⁸⁰ *CP* 6.142.

¹⁸¹ Emerson, Ralph Waldo. “Nature.” *Selected Writings of Ralph Waldo Emerson*. Ed. William H. Gilman. New York: Penguin Group, 1965.

¹⁸² Robin, *Annotated Catalogue of the Papers of Charles S. Peirce* MS 403, p. 22.

to fund the dynamics of everyday lived experience with enriched meaning, and that in turn is verified by everyday experience.”¹⁸³

(7) Understand emergence as an objective process among continua irrespective of willful awareness. To the extent that such novel interpretations provide a stable framework for subsequent interpretation, this stable framework may be understood as contributing to objective concrete reasonableness in two senses:

- a. By reinforcing the validity of the circle from which the interpretation emerged.
- b. By itself being reinforced by the novel interpretations emergent from it. In either case, the effect is an objective one, and as one comes to understand the world better, so the world becomes more intelligible.

(8) The graph cannot show change, as it recognizes emergence to take place in an infinitesimal duration. Yet change nonetheless is imagine to occur by way of emanations of chance from the graph’s absolute center, which elicit emergence upon reaction with some existent object or set of objects and are mediated by frameworks to allow change to be recognized by distinguishing between before/after the emergence. To the extent that it serves as a guide to interpretive emergence, an implicit framework is not in that moment undergoing change. This is because an implicit continuum undergoing change would require a second implicit continuum for the change to be discerned, and since the former continuum is already implicit, such

¹⁸³ Rosenthal, *Speculative Pragmatism*, p. 91.

discernment cannot proceed. Should one object that interpretation as an objective process does not depend on one's "willful awareness," it should be stressed that this point is not being denied. Rather, insofar as one is willfully aware of change, the framework by which such change is rendered intelligible is, in that moment, static.

(9) Understand the term "truth" to refer to the carryover of value from the object to the interpreter with respect to a norm of interpretation, in which Firstness (feeling) and Thirdness (understanding) both participate yet are not conflated. On this definition, Firstness may be understood as conferring the value that is reflected off a given circle, and Thirdness as conferring the form that allows such value to be intelligibly reflected. Recognizing the inescapably situational nature of interpretation, such a definition of truth nonetheless allows for the following distinctions between objectively better and worse frameworks of interpretation:

- a. A better interpretive framework reflects interpretation back onto whatever collections it contains, making them intelligible, and continues to allow for abductive inquiry to determine its place in relation to other frameworks, other norms. It serves as a basis for further questions/hypotheses, and may be understood as translucent. A worse framework reflects back upon the collection of objects and renders them intelligible, but does not allow for further inquiry—it may be understood as opaque. This is to say that it cannot function as a basis to inquire upon its norms in relation to other frameworks, and

as such it often leads to the assumption that all other frameworks *must be within it*. Peirce put this well as follows: “To suppose universal laws of nature capable of being apprehended by the mind and yet having no reason for their special forms, but standing inexplicable and irrational, is hardly a justifiable position.

Uniformities are precisely the sort of facts that need to be accounted for.”¹⁸⁴

- b. One may infer that a framework is opaque when it ceases to appear answerable to the more determinate objects it purports to explain, which often leads to imbalances in which the framework itself is held up as the sole source of normative value and everything else denigrated in relation—akin to Fyodor Dostoyevsky’s line from *The Karamazov Brothers*: “the more I love mankind as a whole, the less I love *man* in particular.”¹⁸⁵ In such cases one may describe such a framework as characterized by a kind of reified Secondness, accruing to itself absolute intelligibility and value. Peirce put the matter well as follows: “A philosophy which emphasizes the idea of the One is generally a dualistic philosophy in which the conception of Second receives exaggerated attention; for this One (though of course

¹⁸⁴ CP 6.12.

¹⁸⁵ Dostoyevsky, Fyodor. *The Karamazov Brothers*. Ware: Wordsworth Classics of World Literature, 2007, p. 58.

involving the idea of First) is always the other of a manifold which is not one.”¹⁸⁶

- c. A better framework of interpretation provides a source of norms for interpretation without allowing itself to be mistaken for the ultimate, retaining the insight that, as Neville puts it: “even the most elementary structures of the universe declare both their contingency and their maker.”¹⁸⁷ Such a framework provides norms by which one remains free and spontaneous rather than constrained, yet also is provided with a means of intelligibility that confers a sense of purpose.

¹⁸⁶ *CP* 1.32.

¹⁸⁷ Neville, Robert C. *A Theology Primer*. Albany, NY: SUNY Press, 1991, p. 30.

Chapter two: Toward a Peircean philosophy of history

If it could be shown directly that there is such an entity as the “spirit of the age” or of a people, and that mere individual intelligence will not account for all the phenomena, this would be proof enough...of synechism.

Charles Sanders Peirce, “Evolutionary Love,” 1893 ¹⁸⁸

The aim of this chapter is to examine the applications of Peirce’s metaphysics toward a philosophy of history as expressed by way of the nested continua model. Peircean metaphysics, with its emphases on realism and temporal continuity, its resistance to foundationalism, and certain aspects of its corresponding evolutionary cosmology of the growth of “concrete reasonableness,” not only offers a means of speculation upon past events as emergent continua within enveloping continua of “history” and “time,” but also provides, in the categories of Firstness, Secondness, and Thirdness, a vocabulary to describe the cognitive processes that characterize the historical imagination. Insofar as its outlines are sketched here, an understanding of history derived from nested continua is not intended to replace the empirical methods of historiography as traditionally practiced—“historiography” defined as the discipline that seeks knowledge and understanding of the human past—but rather to complement and defend it against those who seek, either through a naïve positivism or a self-conscious post-modernism, to radically separate the historian from the object of his or her inquiries.

¹⁸⁸ CP 6.316.

The chapter will proceed in the following steps. First, an errant logical binary among recent discussions on the philosophical status of historiography will be introduced and critically analyzed. This analysis, which borrows from Peter Ochs's method of uncovering and repairing errant binaries as found in texts, is not only necessary to clarify the relation of time and history that will be seen to establish continuities between Neville's and Ochs's theological projects, but has the added benefit of demonstrating the nested continua model as a means of overcoming problems of interpretation. After introducing the problematic debate, the analysis will distinguish first among arguments that aim to debunk historiography as an objective mode of inquiry, then among those that defend historiography on implicitly positivist grounds without addressing the debate's underlying problems. Following this, a relatively brief "historical interlude" will be given to uncover the historical roots of the problematic binary in the debate, tracing a chain of influence from contemporary historiography back through Hayden White, R.G. Collingwood, nineteenth-century German historicism, and finally, the philosophical legacy of Immanuel Kant.

The second half of the chapter will then turn toward those resources found in Peirce that allow one to overcome this binary, as well as explore how these resources bear on nested continua. Peirce's own writings on history will be introduced, as well as some perspectives within the secondary commentary on the subject. This will lead into an examination of historiographical methodology as it might be envisioned according to the nested continua model, including such questions as the status of counterfactuals, explanation, and the reception of

historical objects (and the role that textual creation by historians plays in such reception). Following this, the outlines of a Peircean philosophy of history according to nested continua will be discussed, including the relationship between time and history as respectively larger and smaller concentric circles on the graph, the historical imagination according to Peirce's three categories, and the function of sub-categories within history (i.e. historical periods and trajectories across periods), which will lead into Chapter Three's discussions of history and time in terms of Peter Ochs's and Robert C. Neville's respective projects.

That Peirce should provide resources for such a project is not necessarily surprising. In addition to the many aspects of his thought discussed in the preceding chapter, there is an intrinsic relevance to historicism to Peirce's semiotic triad of sign/object/interpretant, which understands the meaning of a sign specifically with regard to this or that interpretive context.¹⁸⁹ As a critical tool, Peirce's semiotics provides historiography with the means by which to point out the limitations of one's own and others' attempts to extend the distinctions they make beyond their appropriate context. Likewise, just as the semiotic triad has a built-in historicist relevance to it, so do the three categories display an intrinsic relevance to temporality, as time is the widest interpretive circle within which Thirdness renders intelligible the various existent objects (Secondness) that Firstness has made possible.

¹⁸⁹ The term *historicism*, which will be discussed in relation to a tradition of nineteenth-century German historiography (as well as, in Chapter Three, Ochs's Scriptural Reasoning), should not be taken here to mean that Peirce's semiotic categories *only* refer to history. Rather, history is simply understood as *particularly apt* for the kinds of analyses—recognizing signs in relation to contexts—that Peircean semiotics offers.

The history/past binary: a critical analysis

Considering recent writings on the philosophical status of history, certain interactions between philosophers and historians in the United States and Britain indicate the presence of a problem. Beginning with Hayden White's *Metahistory*, from 1973, and continuing more emphatically with the work of F.R. Ankersmit and Keith Jenkins in the 1990's and 2000's, the historical profession has come under criticism as a discipline that, at best, lacks an objective basis for its claims about the past and, at worst, upholds a reactionary and imperializing methodology in its pretensions to professional autonomy. Such arguments have commonly been framed on postmodernist grounds, as an extension of the thesis that meaning lies, if anywhere, in textual creation, and these arguments have been met by a range of reactions from historians: dismissal (seemingly the most common response), hostility (Marwick, Evans), qualified sympathy (Hunt, Appleby, Jacob), and enthusiastic acceptance (Schama).¹⁹⁰ Regardless of the breadth of such responses, the metaphysical aspect of the postmodernist critique—that history is created in the texts of historians—has not been sufficiently addressed in this debate. Although historians have often explicitly defended a realist position with regard to either the past itself or the objectivity of their work, sometimes in quite innovative ways—see, for example, the “practical realism” espoused in 1993's *Telling the Truth About*

¹⁹⁰ Zagorin, Perez. “History, the referent and narrative: Reflections on postmodernism now.” *At the Limits of History: Essays on Theory and Practice*. Ed. Keith Jenkins. London: Routledge, 2009, p. 66. Simon Schama's *Dead Certainties* (1991) has been one of the only significant work of history that has overtly recognized a debt to postmodern critiques (Zammito, John. “Historians and Philosophy of Historiography.” *A Companion to the Philosophy of History and Historiography*. Oxford: Blackwell, 2011, p. 68). As for the other figures mentioned here (Arthur Marwick, Richard Evans, Lynne Hunt, Joyce Appleby, and Margaret Jacob), they will be discussed further in terms of the reasoning on display in the debate's arguments.

History, co-written by Joyce Appleby, Lynne Hunt, and Margaret Jacob—the conversation has been dominated by an implicit dualism in which *either* the text *or* physical evidence is seen as the exclusive province of the real, if in fact anything is real at all.¹⁹¹ The result is an interminable debate, one rendered that much more frustrating because there is no reason to assume that historiography and philosophy cannot be a benefit to one another.

In a compilation of articles on history and philosophy, *At the Limits of History: Essays on Theory and Practice*, Keith Jenkins articulates a postmodern critique of historiography; this volume also includes a rejoinder from Perez Zagorin, who argues on behalf of historiographical autonomy and historical realism. As Jenkins puts it:

Given that the past is categorically of a different kind from history and with, incidentally, both the past and history being ontologically distinct from memory and its cognates, then the “past itself” gives historians no help whatsoever in determining how it would historicize itself: if you wanted to write a history of the world it’s not as if the world could suggest the shape it would prefer to be shaped as. Accordingly, loosed from each other, the past and its myriad historicisations float free such that, undetermined, historians can make the past “historical” any way they like, that is to say, in their *own* images.¹⁹²

Here is a representative excerpt from Zagorin’s response:

History, or historiography, is an independent empirical discipline of great sophistication with a long tradition behind it, which has given rise to many masterpieces. It is in no need of instruction or reform by philosophers or philosophical neophytes. If philosophy is to have a fruitful relationship with history, it must accept the historian’s methods and ways of thinking as it

¹⁹¹ Appleby, Joyce, Lynne Hunt and Margaret Jacob. *Telling the Truth about History*. London: W.W. Norton and Company, 1994

¹⁹² Jenkins, Keith. “Introduction: History Limited.” *At the Limits of History: Essays on Theory and Practice*. Ed. Keith Jenkins. London: Routledge, 2009, p. 5.

finds them. The main contribution it can make to historiography is to help to clarify its own understanding of its discipline and the presuppositions upon which the latter depends.¹⁹³

These articles represent one of the few examples of direct engagement in a debate between historians and philosophers that has been taking place in recent decades—or, to put it perhaps more accurately, it has been less a debate than series of challenges to historians on the part of postmodern philosophers, and a variety of responses from historians elicited by that challenge.¹⁹⁴ These critiques have been taken into explicitly historiographical territory in the work of Hayden White and, more recently, Elizabeth Ermarth and Keith Jenkins, among others, generating a specific discussion that began in the 1970's, picked up steam in the following decades, and continues today in a less extreme, though unresolved form.

The preceding passages from Jenkins and Zagorin were selected not only because they represent some of the arguments that have marked this discussion, but

¹⁹³ Zagorin, Perez. "Rejoinder to a postmodernist." *At the Limits of History: Essays on Theory and Practice*. Ed. Keith Jenkins. London: Routledge, 2009, p. 110.

¹⁹⁴ This is not to imply that historiography and philosophy were not in conversation prior to the 1990's. One finds in R.G. Collingwood's *The Idea of History*—published in 1946 and itself a meeting point between the two disciplines—a catalogue of the evolving influences of philosophical ideas upon Western historiography from the ancient Greeks through the early twentieth century. Also, in the debate over Carl Hempel's "covering law model" of historical explanation during the 1950's and early 1960's, one finds an explicit professional engagement between historians and philosophers. What is unique about the debate considered here is the self-consciousness of its origins in postmodern theory, as well as the radicalism of its claims against historical objectivity. Regarding what is meant by the term "postmodern," John Zammito offers a helpful definition of the collection of scholars who brought about the inception of what has come to be known as postmodernism: "Beginning with Claude Lévi-Strauss's dismissal of historiography in favor of a structuralist synchronicity modeled upon the linguistics of Ferdinand de Saussure, Jacques Derrida radicalized Saussure into a full-fledge pantextualism with the explicit intention of problematizing the possibility of determinate reference, and hence of empirically warranted inter-subjective knowledge. Roland Barthes took this approach one step further in radically assigning all referentiality in historiographic discourse as a mere "reality effect," assimilating historiography entirely into fiction. And Jean-Francois Lyotard argued that the possibility of grand narratives has been definitively refuted (*A Companion to the Philosophy of History and Historiography*, p. 68). For further reading, see Lévi-Strauss's *Structural Anthropology* (1963), Derrida's *Writing and Difference* (1978), Barthes' "The Discourse of History" (1986), and Lyotard's *The Postmodern Condition: A Report on Knowledge* (1984).

because, in them, one finds a distilled version of the errant binary that has rendered this debate problematic. At first glance, the presence of such phrases as “historians can make the past ‘historical’ in any way they like” or “[historiography] is in no need of instruction or reform by philosophy” would alone be enough to indicate an incommensurability of views with regard to the past and what historians make of it. Yet a consideration of the metaphysical implications of the texts reveals that for both Jenkins and Zagorin historical reality resides *either* with the past (or, rather, with the present evidence of that past) *or* with the historian who creates a text that purports to refer to the past. Beverley Southgate has fittingly characterized the problematic nature of the broader debate:

The debate [between historians and “meta-historians”] exemplifies the crisis in contemporary historiography, and highlights the problems of a schizoid discipline...A lack of common ground or even language ensures that the combatants do little more than run inconsequential rings around each other.¹⁹⁵

On one side, Jenkins asserts a radical separation between “past” and “history,” to the effect that historians are free to create the past in any way they like. This ignores the need to select and interpret the evidence from the past. On the other, Zagorin acknowledges that the past and the historian’s cognition are “independent,” yet comes to an opposing conclusion in arguing that historical interpretations are “unalterable” and, by extension, that history has nothing to learn from philosophy.¹⁹⁶ Zagorin, in another article in the same series, reinforces this view by arguing that “evidence acquires its definition and status as evidence only insofar as

¹⁹⁵ Southgate, Beverley. “History and Metahistory: Marwick versus White.” *Journal of Contemporary History*, Vol. 33, Issue 1, Jan. 1996, p. 209.

¹⁹⁶ Zagorin, *At the Limits of History: Essays on Theory and Practice*, p. 113.

it is taken to refer to actual events, persons, institutions, ideas, and so on, which occurred in the past.”¹⁹⁷ This view may be called positivistic in its restriction of access to meaning to present, empirically observable evidence. While Zagorin does admit that the meaning of historical evidence lies in relation to some past event to which it refers, he fails to comment upon the relations between the reality of the past itself, the present evidence of the past, or the hermeneutical activity of the historian in a way that addresses Jenkins’s critique. A shared logical binary with regard to historical meaning thus appears to have generated diametrically opposing conclusions about the philosophical status of historians’ work.

It is important to be clear about what is meant by the term “binary” in logic. A binary is simply a relation between two opposing concepts, in which, for the sake of advancing an argument, one of the concepts is held as preferable to the other. Binaries occur all the time, and are indeed indispensable in formulating an argument; in logical terms, this is the law of the excluded middle, in which something cannot be both P and not P. An *errant* binary, however, is one in which the distinction it offers extends beyond its appropriate context or in which the degree of extension is unclear. Peter Ochs has eloquently described the problems that errant binaries entail:

The law of the excluded middle, with its attendant propositional calculus, generates what we might call a hermeneutics of war. This is a mode of reparative argument that generates comparable sets of antagonistic postures regardless of the goal of one’s argument. It makes secularists, religionists, rationalists, and irrationalists all partners to exclusivist and dogmatic politics and positivist epistemologies. They are positivist because Q is knowable by way of sets of clear and distinct propositions; they are exclusivist because Q

¹⁹⁷ Zagorin, *At the Limits of History: Essays on Theory and Practice*, p. 76.

does not equal P, which means we know that practices will be either Q or P, that Q is correct and that it excludes P.¹⁹⁸

Regarding the debate to be examined, the binary on display in Jenkins's and Zagorin's exchange is of course only one example in a conversation that has accommodated a broad spectrum of views, a conversation in which one does not often have the luxury of interpreting thinkers who address each other's work as directly as they have here. Yet in encountering the following arguments, it will be clear that an underlying metaphysical dualism has remained unresolved despite a variety of responses to the postmodern challenge, and such irresolution has been a detriment to the conversation as well as the potentially rewarding relationship of philosophy to historiography.

The critical method to be employed in interrogating the logic of these arguments owes much to the textual reasoning of Peter Ochs. In his book, *Peirce, Pragmatism, and the Logic of Scripture*, Ochs describes his method of textual reasoning according to the following four steps:

(1) Collect explicit texts as collections of particular arguments, understanding that for two arguments $s(x)$ and $t(x)$, the set of arguments logically implied by s would include the logical contraries of the set of arguments logically implied by t . This gives us the problem of trying to navigate between two opposing arguments.¹⁹⁹

(2) Reconstruct problematic texts in order to distinguish between sense and reference; this is done by subjecting the text to a series of artificial categories with the purpose of raising various hypotheses about the references of the text.²⁰⁰

¹⁹⁸ Ochs, *Another Reformation*, p. 7.

¹⁹⁹ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 24.

²⁰⁰ *Ibid.* p. 26.

(3) Distinguish between two types of leading tendency, with a view toward applying the pragmatic hypothesis that contradictions inevitably appear in debates characterized by more than one leading tendency.²⁰¹

(4) Distinguish between the explicit text and the implicit text of which it is a sign. The task at this point is to explicate the implicit text and transform it from indefinite sign of some problem in some world to a general sign that recommends, to an interpreter, methods of solving that problem.²⁰²

Although the present project differs from textual reasoning in its employment of iconic signification (rather than Ochs's more exclusively textual, symbolic approach), Ochs's four steps may be translated into the terms of the nested continua model. Critical analysis begins by attending to binary distinctions given in the arguments understood as potentially problematic. These arguments, divided into distinct categories as "problematic arguments attacking historiography" and "problematic arguments defending historiography," will be examined in terms of whether the distinctions they display are meaningful with respect to some explicit rule of reasoning—on the graph, this is a circle understood as an interpretive context/rule of reasoning—or, if no such rule is given, as implicitly meaningful *always*, which is to say with respect to the graph as a whole, and as such an errant binary (this refers to step one on Ochs's description). Next, beginning at the lowest possible level of vagueness, which is to say the level closest to the terms given in the "plain-sense" of the arguments themselves, successively wider circles will be drawn as hypotheses for the validity of the distinctions offered. These circles will be drawn in increasing succession—increasingly vague—until two distinct leading tendencies have been identified, one for each set of arguments (this refers to steps two and

²⁰¹ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 32.

²⁰² *Ibid.* p. 33-34.

three of Ochs's method).²⁰³ Finally, a continuum at one order of vagueness removed from these leading tendencies will be hypothesized as the implicit framework by which the two leading tendencies are mutually meaningful (Ochs's step four), followed by an inductive investigation at the level that contains the two leading tendencies, carried out in order to confirm the source of the problematic debate.

Category one: problematic challenges to historiography

The first argument in this category comes from Alan Munslow, author of *The Future of History*, published in 2010. Munslow has as his target "mainstream, professional, academic history," which he defines as follows:

Epistemologically assured historical knowledge, based on the philosophy of perception, disinterest and a kind of self-certified professionalism or on the basis of methodological practices exemplifying objectivity, even-handedness, truth at the end of enquiry and which can withstand varieties of deconstructionism and multi-skeptical critiques.²⁰⁴

Holding that such an understanding of history is little more than a defunct relic, Munslow offers, in light of a hermeneutic based on postmodern textual relativism, an alternative historiography:

History, I hope, will be re-thought with the understanding that form always precedes content, and that it is an authorially, ethically, and aesthetically constituted intervention.²⁰⁵

There are at least two binaries embedded in these points: an explicit one (history as "failed representation" versus history as "successful expressions of the past-as-history," offered in the book's preface) and an implicit one (history as *outside* of the

²⁰³ A *leading tendency* is simply another word for a habit of mind.

²⁰⁴ Munslow, Alan. *The Future of History*. London: Palgrave MacMillan, 2010, p. viii.

²⁰⁵ *Ibid.* p. 221.

historian versus history as *created* in the historian's text).²⁰⁶ Regarding the first, there is nothing overtly problematic about contrasting two versions of historiography that are, after all, mutually incompatible as defined here. Although it is evident that Munslow's argument fails to clarify a rule of reasoning to its audience as to the conditions under which his preferred form of historiography is to be practiced—at what point a text is to be considered a “successful expression of the past-as-history” is not explained—the deeper problem is the binary that is left unacknowledged, which generates the lack of clarity in the explicit binary and conflates the issues around which the broader debate revolves.

A second argument in this group comes from the literary theorist Elizabeth Ermarth, whose *Sequel to History: Postmodernism and the Crisis of Representational Time*, published in 1992, comments directly upon the concept of time upon which historians base their research. Arguing on behalf of what she terms “rhythmic time” as a substitute for “historical time,” Ermarth implies that not only the interpretations of historians, but also the frameworks within which they operate, are invalid. As she puts it:

Rhythmic time—the time of experiment, improvisation, adventure—destroys the historicist unity of the world by destroying its temporal common denominator. In rhythmic time mutual reference back and forth from one temporal movement to another becomes impossible because no neutrality exists between temporal moments; on the contrary, each moment contains its specific and unique definition. Each “time” is utterly finite. The founding agreements that we take for granted in modern historical narratives do not form in postmodern time, just as the common medium of events that we call

²⁰⁶ Munslow, Alan. *The Future of History*, p. viii.

history does not exist in postmodern narratives.²⁰⁷

Although the binary on display in this passage (rhythmic versus historicist temporality) arguably sits alongside the broader metaphysical binary of textual versus external reality rather than extending from it, it is still possible to observe the relatedness of its implications to the metaphysical questions raised above. After all, to deny the inter-subjectivity of time is to deny the possibility of apprehending an objectively real past that one can know or may comment upon. The problems in Ermarth's argument are twofold. First, even though one is directly led to understand that rhythmic time is *always* to be preferred to historical time, she gives little indication of how one is to act upon the adoption of her alternative understanding of time. How is it to be distinguished from action based around so-called historical time? Secondly, her definition of rhythmic time is itself unclear, defined negatively as lacking neutrality, and positively as characterized by "experiment, improvisation, adventure," but little beyond that. As a result, the professional historian is given little to respond to in her argument, to the detriment of any broader understanding of the debate.

A third argument in this category comes from Keith Jenkins, arguably the protagonist among contemporary postmodernist challengers to traditional historiography. Although one might note that Jenkins's text contains what appears to be intentionally inflammatory language—e.g., "patently obvious," "radical uncertainty forever," "gate-keepered craft-practices of the professional historian,"

²⁰⁷ Ermarth, Elizabeth Deeds. *Sequel to History: Postmodernism and the Crisis of Representational Time*. Princeton: Princeton University Press, 1992, p. 53-54.

etc—the issue here is the universality of his binary opposition between traditional and postmodern historiography:

There really is nothing essentially *in* the past to prevent the exercise of endless interpretive freedom by historians; indeed, the only values to be derived from the historicisations of the past come from *outside* of the past and from *outside* the gate-kept craft-practices of the professional historian—in other words are *extrinsic* values. And such extrinsically, which knows of no logical limits or proper procedures, is thus an open invitation to radical uncertainty forever.²⁰⁸

Although Jenkins argues that “the fact that ‘the past’ can be read at will and is so very obviously undetermining in relation to its endless appropriations is to be both celebrated and put into practice,” the very issue of how to put such observations into practice is what his logic fails to clarify.²⁰⁹ For by quite explicitly arguing on behalf of “no logical limits...forever,” Jenkins leaves his readers with little sense of the conditions in which historiography based on postmodern principles departs from historiography as traditionally practiced. Later in the book, Jenkins discusses the metaphysical implications of his challenge to historiography:

If the notion of the aesthetic is really understood then nobody could possibly ask the epistemological-type question any more. There is no point. And this is for the inescapable reason that it is no good expecting an aesthetic to be able to answer epistemological questions. For the difference between these two phenomena is precisely an ontological one; that is, aesthetics and epistemologies are different not in degree but in kind.²¹⁰

Although the binary on display here is between aesthetics and epistemology, one could ask for little better overt discussion of the metaphysical binary between text (aesthetics) and objective past (epistemology) than the above passage.

²⁰⁸ Jenkins, Keith. *Refiguring History: New Thoughts on an Old Discipline*. London: Routledge, 2003, p. 10.

²⁰⁹ *Ibid.* p. 10.

²¹⁰ *Ibid.* p. 69.

Category two: problematic arguments from historians

The first argument from this category comes from Richard Evans's *In Defence of History*, from 1997, which argues on behalf of historiography and attempts to respond to the challenges of the postmodernists. In his concluding passage, one finds a helpful catalogue of the various challenges of postmodernism:

When Patrick Joyce tells us that social history is dead, and Elizabeth Deeds Ermarth declares that time is a fictional construct, and Roland Barthes announces that all the world's a text, ...and Frank Ankersmit swears that we can never know anything at all about the past so we might as well confine ourselves to studying other historians, and Keith Jenkins proclaims that all history is just naked ideology designed to get historians power and money in big university institutions run by the bourgeoisie, I will look humbly at the past and say despite them all: it really happened, and we really can, if we are very scrupulous and careful and self-critical, find out how it happened and reach some tenable though always less than final conclusions about what it all meant.²¹¹

Although Evans makes clear that truth in history is valid and to be preferred to the various iterations of postmodernism, readers are left without a rule that serves to guide one's judgments in weighing these approaches. This is a problem, one that is compounded by the fact that the plain-sense of the text also does not respond to postmodernism's challenges in the same terms in which those challenges were presented. This problem also appears in an earlier passage, which presents the binary between addressing ideas on their own merits and submitting to a majority opinion of interpreters:

The real conclusion to be drawn from the disputes over postmodernism and historiography is surely that arguments and theories, however dominant in the intellectual life of their day, have to be assessed on their own merits, not accepted uncritically simply because they are espoused by a majority.²¹²

²¹¹ Evans, Richard J. *In Defence of History*. London: Granta Books, 1997, p. 253.

²¹² *Ibid.* p. 14.

One might infer that, out of these two alternatives, postmodernism is implied as the view that submits to the majority opinion of the moment, but as this distinction is not found in the challenges of the postmodern texts themselves, one might take this as an example of what Peirce would have called a “paper doubt,” which is to say a distinction that does not really need examining. The more significant distinction, the metaphysical one, that has informed the debate from the beginning, is left unaddressed.

A second argument from this group may be found in the work of Arthur Marwick, whose article “Two Approaches to Historical Study: The Metaphysical (Including Postmodernism) and the Historical” contains within its title the binary at issue. In his article, Marwick likens traditional historiography to the natural sciences and argues that “metaphysicians” operate with terminology that is foreign to historians. As he puts it:

Just as the natural sciences are the systematic studies through experimentation, observation, etc...history is the study of the human past, through the systematic analysis of the primary sources, and the bodies of knowledge arising from that study, and therefore, is the human past as it is known from the work of historians. History is about finding things out, and solving problems, rather than about spinning narratives or telling stories. To the metaphysicians “history” is something altogether different: though definitions are never offered, it turns out to be nothing less than the material process by which the past itself becomes the present, and, indeed, the future, unfolding in a series of stages, according to some pattern or meaning, involving conflicts or accommodations in the exercise of power.²¹³

²¹³ Marwick, Arthur. “Two Approaches to Historical Study: The Metaphysical (Including ‘Postmodernism’) and the Historical.” *Journal of Contemporary History*, Vol. 30, Issue 1, Jan. 1995, p. 12.

In a sense, this passage displays the same sort of evasion that characterizes Evans's argument, in which historiography is immune to the critiques of postmodernists by virtue of the practices in which historians conduct their research. Marwick makes his resistance to philosophical terminology clear in the following passage:

The very issues discussed by the postmodernists, and the very vocabulary used, indicate that postmodernism has deep roots in traditional philosophy: taken out of context, and used as transparent tools of epistemological analysis, "positivist," "humanist," "idealist," "materialist," constantly on the lips of postmodernists, have no salience for historians.²¹⁴

Although Marwick asserts that "the search for universal meaning or universal explanation is, therefore, a futile one," his resistance to universal categories is belied by the binary opposition implied in the title of his essay, which itself trades in universality by asserting that historians are *always* better off disregarding metaphysical terminology.²¹⁵ By not allowing a rule in which his binary between historiography and philosophy is to be applied, and, more significantly, by reinforcing the sense that history belongs either to the historian or to empirical evidence, Marwick does not address the postmodern challenge.

Investigating leading tendencies and historical roots

The binaries mentioned above refer to a range of concepts and contexts, yet what all appear to have in common is this: meaning in historiography is understood to reside exclusively either in an objectively real past whose present-day evidence provides access to it, or in the imagination of the present-day historian who devises theories to account for the information and then chooses freely among literary

²¹⁴ Marwick, "Two Approaches to Historical Study: The Metaphysical (Including 'Postmodernism') and the Historical," p. 13.

²¹⁵ Ibid. p. 12.

tropes in committing these theories to text. If the hypothesis that the debate is implicitly based on a binary between past and present is correct, this problem stems from a logical error in which historical reality is either restricted to the texts that historians create or to the physicality of the evidence available to them, to the effect that what is real must lie either within the mind or without it. Proceeding on the understanding that this binary indeed exists and is a problem, it is helpful to distinguish between the respective leading tendencies this implicit binary elicits. For the latter point of view, the leading tendency appears to be that historiography is an objective discipline—if not identical to natural science, then at least similar to it in that regard—whose claims are immune to philosophical critique. For the former point of view, the leading tendency appears to be the assumption that the intervening presence of the historian’s imagination deprives historiography of its access to certain knowledge of the past, and that therefore the past and present are separated not only by an impassible epistemological divide, but perhaps an ontological one as well (in Jenkins’s case, the ontological divide is explicitly stated).

The present hypothesis, then, is that these divergent tendencies stem from a shared implicit binary between present and past (of the previously examined arguments, only Ermarth’s makes this underlying premise of temporal discontinuity explicit), and that even though the defensive posture of historians presumes some form of continuity of time, their arguments, in stemming from this implicit binary and arguing in positivistic terms, are thus deprived of the resources that would allow them to defend their profession against these philosophical attacks at the same level from which the attacks have been launched. In other words, the fight is

not just about history or historiography, but also about the nature of time. Hayden White, whose work will soon be discussed as one of the immediate forebears of this debate, recognizes this shared temporal binary between his own perspective (postmodernism) and that of the positivism of Arthur Marwick:

Marwick does not believe in the materiality of the past; it does not, in his view, pre-date the historian's study of the documents or primary sources; and it (the past) therefore appears to be a "construction" of historians themselves. In other words, Marwick seems to agree with the "Postmodernists" who, according to him, deny the "reality" of history; he differs from them only in his notions about the basis for and the proper way to construct proper accounts of the past.²¹⁶

White's view, which Murray Murphey has aptly characterized as the view that "the imaginative constructions that historians create are theories in which the persons and events of the past occur as theoretical constructs," does indeed apply to Marwick and his cohorts in the terms in which they present their arguments.²¹⁷ It may be hypothesized, then, that in terms of the nested continua model, which understands "time" as legible on the graph as a continuous circle, the discontinuity represented by the two camps' leading tendencies is to be investigated at a level of vagueness near to the source of the problem. In this case the level is to be represented by a circle designated as "history," and as such the sources of the assumed binary for the debate may be traced by way of a brief historical investigation.

The most immediate historical source of the binary in question is Hayden White. White was one of the first historians to problematize the historical text, and

²¹⁶ White, Hayden. "Response to Arthur Marwick." *Journal of Contemporary History*, Vol. 30, Issue 2, Apr. 1995, p. 237.

²¹⁷ Murphey, Murray. *Truth and History*. Albany, NY: SUNY Press, 2009, p. 133.

in his work one finds a direct precursor to the overt relativism of Keith Jenkins and some of the other latter-day postmodernists. In 1973's *Metahistory*, White claimed that the literary elements of a historical text, freely chosen by the historian, are inseparable from the act of understanding the past. Criticizing the view that truth is the guiding principle of historiography, White explored the linguistic structures by which historical evidence is transformed into the construction of narrative. As he put it:

The historian confronts the historical field in much the same way that the grammarian might confront a new language. His first problem is to distinguish among the lexical, grammatical, and syntactical elements of the field. Only then can he undertake to interpret what any given configuration of elements or transformations of their relationships mean. In short, the historian's problem is to construct a linguistic protocol, complete with lexical, grammatical, syntactical, and semantic dimensions, by which to characterize the field and its elements *in his own terms*, and thus to prepare them for the explanation and representation he will subsequently offer of them in his narrative. The preconceptual linguistic protocol will in turn be—by virtue of its essentially *prefigurative* nature—characterizable in terms of the dominant tropological mode in which it is cast.²¹⁸

As language precedes analysis, so is historical research inseparable from the writing of it. For White, historical writing irremediably involves literary tropes, and there cannot be any research until the field is constituted linguistically. The objects of history are not objects of the past, but are linguistically constituted substitutes that are freely chosen and imposed on the data.²¹⁹

White's claims as to the inescapably literary nature of historiography clearly resemble the arguments of Jenkins, Ermarth, and other postmodern critics. Though he refrained from claiming that common understandings of continuous temporality

²¹⁸ White, Hayden. *Metahistory*. London: Johns Hopkins University Press, 1973, p. 30.

²¹⁹ Murphey, *Truth and History*, p. 124.

should be replaced with a “rhythmic” sense of time (as with Ermarth), or that past and present are of different ontological status (as with Jenkins), his insertion into historiography of the historian’s linguistic imagination provided the wedge between present and past that would be driven in further through those later arguments. Concomitant to this wedge was White’s understanding of relativism, which he linked to ideology on the part of the historian:

The very claim to have distinguished a past from a present world of social thought and praxis, and to have determined the formal coherence of that past world, *implies* a conception of the form that knowledge of the present world also must take, insofar as it is *continuous* with that past world. Commitment to a particular *form* of knowledge predetermines the *kinds* of generalizations one can make about the present world, the kinds of knowledge one can have of it, and the hence the kinds of projects one can legitimately conceive for changing that present or for maintaining its present form indefinitely.²²⁰

White’s argument is subtle, but close inspection shows this passage to be implying the binary in question. Although he commented upon a possible continuity between past and present, metaphysically speaking—essentially the same as Peirce’s synechism in this respect—his epistemological cut between knowledge and reality led him to assert an arbitrariness to historiographical texts in which literary form must precede content and implicit ideological bias must precede literary form. Although White’s philosophical influences were primarily those of continental postmodernism, the historian he most resembled in this regard was R.G. Collingwood, who, despite his not often being associated with that tradition, is

²²⁰ White, *Metahistory*, p. 21.

perhaps the best known exemplar of understanding historiography in terms of the historian's imagination.²²¹

Unlike White, Collingwood conceived the imaginative component of historiography not in terms of textual construction, but in terms of cognitive reenactment of past events. Writing his most prominent works in Oxford in the 1930's and 1940's, a time in which Anglophone historiography had yet to move beyond the goal of reconciling history to scientific methodology that had been the legacy of nineteenth-century German historicism, Collingwood sought to distinguish between history and science by emphasizing the essentially human aspect of history, in which understanding humans is part of a fundamentally different process than understanding the mindless objects studied in natural science.²²² For Collingwood, history required its own way of thinking, as he puts in the following passage from *The Idea of History*:

Historical thought is an object with peculiarities of its own. The past, consisting of particular events in space and time which are no longer happening, cannot be apprehended by mathematical thinking, because mathematical thinking apprehends objects that have no special location in space and time...Nor can the past be apprehended by theological thinking, because the object of that kind of thinking is a single infinite object, and historical events are finite and plural. Nor by scientific thinking, because the truths which science discovers are known to be true by being found through observation and experiment, whereas the past has vanished and our ideas about it can never be verified as we verify our scientific hypotheses.²²³

²²¹ Robin George Collingwood (1899-1943), who was educated at Oxford and spent his entire professional life there, is among the most renowned figures to attempt to treat history from a philosophical perspective (and vice versa). Influenced by the German idealism of Kant and Hegel, and well as such Italian theorists of history as Giambattista Vico (1668-1744) and Vico's latter-day follower Benedetto Croce (1866-1952), Collingwood was also a practicing historian, and traced in his *The Idea of History* the development of the methodologies of the historical profession.

²²² Beiser, Frederick. *The German Historicist Tradition*. Oxford: Oxford University Press, 2011, p. 8.

²²³ Collingwood, R.G. *The Idea of History*. Oxford: Clarendon Press, 1946, p. 5.

For Collingwood, the thought in the past action, reenacted in the historian's mind, both "individuates and illuminates," as Graham and Cynthia MacDonald have memorably put it, providing an understanding of the action that makes further explanation redundant.²²⁴ As Peter Kosso has noted, this reveals a circularity in Collingwood's reenactment thesis, since, on one hand, individual events and actions are understood by being situated in the larger context, and, on the other, the larger context is understood by being built of individual events.²²⁵

By sharply distinguishing between the scientific and historical imagination, as well as between imagination as free and intentional and physicality as deterministic, Collingwood came to understand metaphysics historically, as whatever a given culture in a given time takes as its deepest and most indubitable assumptions. As with White, then, Collingwood's philosophy of history demands an attention to narrative, for to describe a set of ideas, metaphysical or otherwise, in their narrative place is, at the same time, to understand them. Regarding metaphysical propositions in particular, these provide the basic framework within which all the questions of a particular period or civilization may be significantly put. As Collingwood put it:

All metaphysical questions are historical questions, and all metaphysical propositions are historical propositions. Every metaphysical question either is simply the question of what absolute presuppositions were made on a certain occasion, or is capable of being resolved into a number of such questions together with a further question or further questions arising out of

²²⁴ MacDonald, Graham and Cynthia MacDonald. "Explanation in Historiography." *A Companion to the Philosophy of History and Historiography*. Oxford: Blackwell, 2011 p. 139-140.

²²⁵ Kosso, Peter. "Philosophy of Historiography." *A Companion to the Philosophy of History and Historiography*. Oxford: Blackwell, 2011, p. 24.

these.²²⁶

Metaphysical propositions function as absolute presuppositions that, as W.B. Gallie put it in a critical analysis of Collingwood's work, provide the basic framework within which, and only within which, all the questions of a particular period or civilization may be significantly put.²²⁷ As such, metaphysics is a proper and necessary object of historical study, yet this does not imply that a common metaphysical position pervades history as a whole, as with Hegel, but rather that history pervades metaphysics. The preeminence of history over metaphysics, which will be understood below as one of the fundamental features of nineteenth-century German historicism, notably lacks a common framework for understanding any form of continuity between past and present, for if the past is identifiable by way of metaphysical assumptions as absolute presuppositions, and if, as seems reasonable, the present likewise features some set of structurally similar, albeit distinct, set of assumptions, then how is one to examine the relation between *those* assumptions, then, and *these* assumptions, now? Collingwood's reenactment thesis presumed some kind of overarching temporal continuity that includes both past ideas and present ideas as reenactments, yet the distinctions upon which his writings were based prevented it from being articulated clearly.

²²⁶ Collingwood, R.G. *Essay on Metaphysics*. Oxford: Clarendon Press, 1940, p. 49. Collingwood's sense of metaphysical propositions as absolute also applied to the scientific method—as he put it in his *Essay on Metaphysics*: “no metaphysician, no scientist” (p. 233). The distinction between historiography and science for him was that, for history, metaphysics is an *object* of study, whereas for science, it is a set of *presuppositions*. Yet when one recalls that metaphysical presuppositions can only be known historically, this has the effect not only of separating scientific and historiographical methodology, but assigning science a lower epistemological status than history.

²²⁷ Gallie, *Philosophy and the Historical Understanding*. London: Schocken Books, 1964, p. 213.

Collingwood is an identifiable forebear of the concerns that animated Hayden White and his followers, as well as the positivistic defenders of historiography examined above, and both sides have referenced him, often critically, in the framing of their arguments. For example, postmodern critic F.R. Ankersmit wrote of Collingwood as follows:

The past is no more problematic for Collingwood than the reality of the objects we perceive around us. The difficulty here, however, is that the re-enactment procedure transfers only the timeless idea to the present and not an act of thinking which *is* situated in the past.²²⁸

On the other hand, Arthur Marwick finds in Collingwood an ancestor to the postmodernists: “[Collingwood’s] mystical outbursts simply provided material for history’s enemies: those who, rightly, derided a history which turned out to depend solely on the historian’s intuition.”²²⁹ For his part, Collingwood’s own texts provide early recognition of some of the problems of what would become the postmodernist challenge, and yet also seeds of the same sorts of ideas. For example, it is possible to identify in the postmodern challenge to historiography what Collingwood describes as irrationalist anti-metaphysics, which “aims at the abolition of systematic and orderly thinking in every shape.”²³⁰ Yet in the sense of Collingwood’s work exhibiting aspects of the postmodern challenge, the following point from Richard Evans is well taken, which is that on the reenactment thesis, the very act of observing and collecting was itself governed by the historian’s *a priori* beliefs about the past, and as such, we find an ancestor to such later arguments as those of White

²²⁸ Ankersmit, F.R. *The reality effect in the writing of history: the dynamics of historiographical topology*. Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen, 1989, p. 16.

²²⁹ Marwick, Arthur. *The Nature of History*. New York: Dell Publishing, 1970, p. 104-105.

²³⁰ Collingwood, *Essay on Metaphysics*, p. 83.

or Ankersmit about the intervention of the historian upon the past.²³¹ Such ambivalence in Collingwood's work grew out of its distinctions between history and science and was part of the legacy of nineteenth-century German historicism, which likewise understood history as an ultimate interpretive horizon.

Like many historical movements, German historicism covered a broad range of thinkers in a broad range of times, spanning roughly from the writings of Johann Gottfried Herder (1744-1803) to those of Max Weber (1864-1920), including such figures as Wilhelm von Humboldt (1767-1835), Leopold von Ranke (1795-1886), Wilhelm Dilthey (1833-1911), and Heinrich Rickert (1863-1936), and bookended broadly by eighteenth-century Enlightenment rationalism and twentieth-century logical positivism.²³² Historicism is not limited to German thought, of course, and Chapter Three will discuss a different form of historicism in the post-liberal theological tradition of which Scriptural Reasoning is a part. Yet Germany is unique because it was there that history as its own subject of philosophical analysis first attracted the attention of a collection of thinkers self-consciously participating in a project defined against the timeless universalisms of the Enlightenment. In spite of the many differences among the figures listed above, the movement broadly adhered to the understanding that, as Beiser puts it, "everything in the human world—culture, values, institutions, practices, rationality—is made by history, so

²³¹ Evans, *In Defence of History*, p. 31.

²³² Beiser, Frederick. *The German Historicist Tradition*, p. 8. Rickert in particular has been associated with what has been called *neo-Kantianism* in late nineteenth-century German thought, a movement that also included, along with such figures as Ernst Troeltsch (1865-1923) and Wilhelm Windelband (1848-1915), one of Ochs's preeminent influences, Hermann Cohen (1842-1918), who emphasized Kant's logic and epistemology as a response to prevailing anti-idealism of mid nineteenth-century German philosophy

that nothing has an eternal form, permanent essence, or constant identity which transcends historical change.”²³³ While such thinkers as Hegel famously sought to articulate the conditions for a philosophy of history that allowed for speculation upon the teleological meaning of events, German *historicism* was different in that it aimed for the study of history to stand alongside (and sometimes in opposition to) the natural sciences—a key difference being that, where science treats objects in their *generality*, historiography treats them in their ever-changing *individuality*, with the only constants being the methodology by which individuals are to be known and history as the impassible horizon that contains them.²³⁴

German historicism bears on the historical roots of the postmodernism/historiography debate for two reasons. The first is that the movement was the first in which historiography was understood as an autonomous discipline with a consistent methodology, which is precisely what the postmodern challenge to historiography attacks and what both present-day historians (on positivistic grounds) and Collingwood (on idealist grounds) have sought to defend. The second reason follows from the first, which is that German historicism insisted that epistemological issues precede ontology. As Beiser puts it:

It should be plain that the historicists’ concern was not *first-* but *second-order* history, i.e. historiography, the methods and standards of writing history...Although a philosophical tradition, historicism should not be

²³³ Beiser, Frederick. *The German Historicist Tradition*, p. 2.

²³⁴ *Ibid.* p. 4. German historicists were aware of the legacy of scholastic nominalist metaphysics in their claims that everything is fundamentally individual, and as Beiser put it, nominalism was the “rationale for several of the defining doctrines of historicism,” including the elimination of metaphysical generality as invalidated by individuality, as well as relativism concerning human cultures (p. 5). A key difference, however, was that the nominalists were *aware* that nominalism was a metaphysical position, whereas the historicists reduced metaphysics to epistemology.

equated with the aims and problems of the philosophy of history. The historicist tradition was essentially *epistemological*, involving second-order reflection upon historical knowledge; it was not *metaphysical*, involving first-order speculation about the laws, ends, or meaning of history itself.²³⁵

In all parties examined in this debate, whether the argumentative thrust has aimed to validate historiography as a science, distinguish its autonomy from science, or dissolve its autonomy altogether, the focus has been on method and epistemology as part of a guiding assumption that one's epistemological parameters ultimately determine one's ontological positions. For Jenkins or Marwick, Collingwood or White, the basic fissures concern the imagination of the historian in relation to his or her method, while the past itself floats freely from a history whose ultimacy renders everything within it contingent *except* method, which is either precise and "scientific" or debunked and "literary." German historicists stated these divisions in a more explicit form than their present-day exponents, perhaps because of its closer historical proximity to the most likely source of the errant binary: Immanuel Kant.

Kant's influence on Peirce has already been discussed, however briefly, as has some basic reference to his vast legacy in nineteenth and twentieth-century Western philosophy. Yet regarding the strain of thought that has generated the errant binary between past and present regarding historiography, a bit more may be said as to how Kant influenced German historicism, Collingwood, White, and the participants in the present debate. As Beiser puts it:

Despite Kant's persistent rationalism, despite his ahistorical conception of reason, and despite his complete lack of "historical sense" ...Humboldt, Ranke, Droysen, Rickert, Lazarus, Lask, Dilthey, Simmel, and Weber all applied Kantian principles to historical knowledge itself. The new Kantian paradigm

²³⁵ Beiser, Frederick. *The German Historicist Tradition*, p. 8.

seemed to unlock, at least in principle, the entire human world, past and present. We can understand the human world, they believed, for the simple reason that we have made it, and whatever we create is perfectly transparent to ourselves. By the same token we have the capacity to relive it, to engage in the same creative activities as people once did before us.²³⁶

It is true that Kant had a positive account of time as unitary and transcendental condition for knowledge, and that in later years he came to recognize that his own criteria for knowledge, based on unchanging categories, would not account for the evolution of historical objects of inquiry across time.²³⁷ Yet Kant's sense in which an object is either definitively unknowable or knowable according to transcendental foundations led to the debate over the philosophical status of historiography. The rest of this chapter will show how Peirce's work allows one to understand past events without having to attend to the epistemological constraints of Kant's system, since what makes history genuinely interesting is that its imaginative component is presumed to really relate to the past instead of literary forms or empirically available objects.

Toward a Peircean philosophy of history

Since at least as far back as W.B. Gallie's 1964 work, *Philosophy and the Historical Understanding*, commentators on Peirce have noted the historical implications of his work.²³⁸ For example, in a 1991 article entitled "Charles Sanders Peirce, historian and semiotician," William Pencack called attention to some of the

²³⁶ Beiser, Frederick, *The German Historicist Tradition*, p. 17.

²³⁷ Kant, Immanuel. *Fundamental Principles of the Metaphysic of Morals*, tr. T.K. Abbott. Indianapolis : Bobbs-Merrill : Liberal Arts Press, 1949, p. 122.

²³⁸ London: Chatto & Windus, 1964.

insights offered by Peirce's writings on history, arguing that Peirce is especially astute on three points:

First, history does not "evolve," it erupts—suddenly transforming itself under the pressure of surprising events. Second, at such conjunctures, great men do make a difference, men who cannot possibly be considered "products" of "forces." And third, these men do in fact shape history, *to the extent that* they wholeheartedly and unselfishly dedicate themselves to a higher ideal.²³⁹

Citing texts in which Peirce discussed Napoleon, Cola di Rienzi, and the architects of Gothic cathedrals, Pencack explains how a Peircean theory of history shows that "history happens when things break down and reveal creative possibilities for new starts, then great men become the signs of such periods, the keys to determining history's structure."²⁴⁰ Although commendable in recognizing the ability through Peirce to link specific people and events with more general epochs, as well as the ability to describe history in semiotic terms, Pencack's account is limited in at least two ways. First, although a lively writer of prose and possessed of a tremendous range of intellectual interests that included historical topics, Peirce did not see himself primarily as a historian, nor, arguably, did he produce any first-rate works of historiography.²⁴¹ His writings on the subject tended to be either logically instructive without offering much in terms of historical insight (his commentaries on certain aspects of logical and philosophical history notwithstanding), or to lapse

²³⁹ Pencack, William. "Charles Sanders Peirce, historian and semiotician." *Semiotica*, 83, 3/4, 1991, p. 311

²⁴⁰ *Ibid.* p. 330.

²⁴¹ This is not to say that Peirce's writings on history are not instructive. For example, Peirce attempted to apply his researches on statistical mathematics to identify commonalities among the "Great Men" of history, presenting prominent figures according to a taxonomy of different types of genius, longevity, and other characteristics (*CP* 7256-266). Yet such efforts arguably say as about Peirce's insights on mathematics as they do about history, not that these are mutually exclusive.

into narratives of ineluctable change common to much historical writing in the nineteenth century.²⁴² Second, in arguing that history erupts rather than evolves, Pencack neglects whole areas of historical phenomena, seeming to deny both Peirce's emphasis on continuity and the linkage between specific actors and complex networks of correlate factors that real Thirdness implies. History erupts *and* evolves.

Another figure to acknowledge the historical applications of Peircean semiotics has been Gérard Deledalle, author of *Charles S. Peirce's Philosophy of Signs*. In discussing the semiotic import of the beginnings of the French Revolution, Deledalle writes:

The storming of the Bastille is a symbol in the system of meanings in the history of France. It refers to a certain idea of liberty, the negation or refusal of the arbitrary. But the documents which have reached us (the Bastille having been destroyed), which imagery or our imagination represent, are the indices of a state of France described by history and interpreted by the systems of symbols. However, let there be no mistake, the enactment or action is not limited to a given action, for there is no action which reveals, and, at the same time, constitutes, its meaning.²⁴³

In this passage, Deledalle not only acknowledges the ability of Peircean vocabulary to express historical events; he also recognizes the relation between an actual event,

²⁴² For the former, see Peirce's aforementioned classification of great men of history; for the latter, see Peirce's 1863 address to his high school, "The Place of Our Age in the History of Civilization" (*CP* 8.2) or 1893's "Evolutionary Love" (*CP* 6.287-295), from the first *Monist* series, both of which, despite being rather pessimistic about the nineteenth century in relation to other periods, nonetheless displayed a determinist view of historical progress. Limitations notwithstanding, in terms of Peirce's writings *about* historiography, he did recognize some of the same issues of realism and nominalism that characterized the contemporary debate discussed in this chapter, as David O'Hara has likewise observed ("Peirce, Plato and Miracles: On the Mature Peirce's Re-discovery of Plato and the Overcoming of Nominalistic Prejudice in History," p. 26-39. *Transactions of the Charles S. Peirce Society*, 44, 1, 2008).

²⁴³ Deledalle, Gérard. *Charles S. Peirce's Philosophy of Signs*. Bloomington, IN: Indiana University Press, 2000, p. 106.

the evidence it leaves behind, and the imagination of a present-day interpreter in a manner that directly bears on unfinished temporal continuity as implied by synechistic metaphysics.

Likewise, in Stephen L. Collins and James Hoopes's outstanding article, "Anthony Giddens and Charles Sanders Peirce: History, Theory, and a Way Out of the Linguistic Cul-de-Sac," the authors add to the recognition of Peirce's metaphysics as helpful to historiography an awareness of the impasse in which historiography currently finds itself in the face of precisely the postmodern critiques discussed earlier in this chapter. As they put it: "intellectual history after the 'linguistic turn' remains bogged down in methodological disputes among a range of combatants who differ on epistemological questions but are in fundamental agreement that epistemology can be discussed without reference to ontology," the authors recognize the interminability of the debate and the errant binary upon which it has been based.²⁴⁴ As they put it:

We live, [the participants] all at least implicitly agree, amid two separable groups of phenomena. On the one hand, there are objects, experiences, contexts, materiality, or reality. On the other there are signs, thoughts, texts, language, or meaning....But neither side examines the implications of their assertions for our understanding of the ontological constitution of the social world. Bracketing or occluding ontology results in separating epistemology from ontology, and reinforces a taken-for-granted dualism. Thus, instead of leading us forward, discussions about historical knowledge and intellectual history in the wake of the 'linguistic turn' and have come upon a 'cul-de-sac.'²⁴⁵

²⁴⁴ Collins, Stephen L. and James Hoopes. "Anthony Giddens and Charles Sanders Peirce: History, Theory, and a Way Out of the Linguistic Cul-de-Sac." *Journal of the History of Ideas*. Vol 56, Issue 4, Oct. 1995, p. 626.

²⁴⁵ Collins and Hoopes. "Anthony Giddens and Charles Sanders Peirce: History, Theory, and a Way Out of the Linguistic Cul-de-Sac," p. 626.

This is a highly astute reading, one that recognizes “neopositivists on both sides of the linguistic turn.”²⁴⁶ The authors are likewise correct to point to Peirce’s metaphysics as a possible way through the “cul-de-sac,” putting the matter as follows:

Peirce addressed as seriously and thoroughly as any modern philosopher the epistemological and ontological questions now central to the debate between poststructuralists and historical contextualists...In showing that relativist and objectivist views of knowledge are not mutually exclusive, Peirce’s philosophy reinforces the practical usefulness of the idea that knowledge is the key to understanding the practical unity of social circumstances and human agency.²⁴⁷

This is helpful for at least two reasons. First, the authors observe that Peirce’s metaphysics allows one to recognize links between individual actors in history and broader forces that extend with greater generality across periods of time, as well as how such links relate to an understanding of ontology. Second, the continuity between interpreter and world presumed by Peircean synechism means that neither present nor past interpretations can be dismissed as irrelevant to their behavior.

Christopher Hookway is another commentator who has recognized the historical relevance of Peirce’s work, commenting on precisely those aspects of Peirce’s metaphysics most helpful to the nested continua model. In terms of the particular relevance of synechistic metaphysics for historical understandings, Hookway has noted the potential for historical analysis stemming from the evolutionary cosmology of the first *Monist* series:

²⁴⁶ Ibid. p. 634.

²⁴⁷ Ibid. p. 642.

In light of the view of explanation which Peirce defends [in the evolutionary cosmology of his *Monist* series], we explain laws or regularities by deriving them from more abstract or general laws...This promises an infinite regress of laws and explanations, and it can seem that we can only block this regress by allowing that at some point we reach a law that cannot be explained, which is an ultimate...It is plausible to read Peirce as trying to block the regress of explanations by using this [historical] strategy; the evolutionary cosmology provides us a framework for understanding laws historically which enables us to block the regress of explanation.²⁴⁸

Concerning Hookway's point about an infinite regress, the nested continua model recognizes through its category of absolute Thirdness (as an ever-receding horizon) the kind of infinite regress that Hookway notes, which it expresses in terms of the possibility for innumerable orders of continua as legible markings/circles upon the graph. Such a regress should not necessarily be taken as a problem, however, since whatever infinitude *possibility* may possess, in *actuality* all orders of continua are finite, and the nested continua graph is only designed to tolerate simple sparse sequences at any given time. Nonetheless, Hookway's point about understanding generality historically to block such a regress is well taken, so long as one understands that not only "history" as a whole, but an interpreter's particular place *within* history, which is to say the unconscious matrix of indubitable norms that characterize one's cultural situation (with "history" as referent to render such situations intelligible).

Nested continua and historiography

Having identified some of the secondary commentary on the historical dimension of Peirce's work, analysis now turns to the methodological issues in historiography raised in the postmodernism/historiography debate. There are

²⁴⁸ Hookway, Christopher. *Peirce*. Oxford: Routledge, 1992, p. 267-268.

three aspects that will be discussed: (1) the status of historiography as a discipline, (2) historiography's understanding of explanation, and (3) whether it may viably employ counterfactual logic as a part of explanation. Regarding the first point, historiography, as noted in the preceding section of this chapter, has been categorized as a science, as literature, or some combination of the two. Among those who feel that historiography should be regarded as autonomous from other disciplines, two arguments are typically given. The first is that historiography, unlike theoretical science, is concerned with unique events, a point that was observed in regard to German historicism and Collingwood's reenactment thesis. Whereas natural science prides itself on a paradigm-independent, objective standard that emphasizes experimental repetition, the events that historians study are manifestly not replicable. For example, the seventeenth-century English Civil War can only happen once. Yet just as certain sciences such as astronomy or geology, whose hypotheses cannot be replicated experimentally, proceed on the basis of analysis through taxonomy, so can nested continua allow one to see that the uniqueness of specific past events may be related to more general categories that are no less real for being vague. To prolong the example, then, the English Civil War presents characteristics that may be classed, through precision, among various more general circles: civil wars, seventeenth-century power struggles, etc. To describe it by way of any of these broader categories opens up the possibility of testing claims about the English Civil War by looking at the details of other members of the same category as rendered cardinally upon the nested continua graph.²⁴⁹

²⁴⁹ Kosso, *A Companion to the Philosophy of History and Historiography*, p. 20.

The second common argument for the uniqueness of historiography is that, unlike the natural sciences, historiography is concerned with the actions of human beings.²⁵⁰ In this argument, the nested continua model acknowledges a distinction between human and non-human objects of inquiry, but not necessarily a categorical epistemological divide. After all, to interpret the meaning of, say, the Meiji Restoration in Japan is to imagine that the nature of the Meiji Restoration was different from that of the geothermal activity of Mount Fuji by being vague to a different degree, tolerating a different number of relations and discontinuities, including the referent of human intentionality in its inquiries, yet not of some distinct fundamental nature. The difference between natural science and historiography is simply one of different continuous frameworks of interpretation for real objects, a point corroborated by Victorino Tejera's observation that, for Peirce, what is meant by the term "science" is that evidence should compel unanimity of interpretation as a kind of normative horizon, that the pursuit of knowledge be public, and that it proceed on a method that takes its results to be fallible.²⁵¹

Another perennial question for historiography concerns the nature of historical explanation. As Giuseppina D'Oro has described it, to *explain* a human action rationally requires constructing a practical argument and establishing a

²⁵⁰ D'Oro, Giuseppina. "Historiographic Understanding." *A Companion to the Philosophy of History and Historiography*, p. 142.

²⁵¹ Tejera, Victorino. *The Path Not Taken: Aesthetics, Metaphysics, and Intellectual History in Classic American Philosophy*. London: Rowman and Littlefield Publishers, 1996, p. 19.

logical fit between an agent's beliefs and motives and his or her actions.²⁵² Yet nested continua implies a different sort of behavior than the mere conformity of individual acts to a general law that describes them. With regard to the distinction between a human action, which requires intentionality, and a bodily movement, which does not, it is possible through nested continua to describe something as an action rather than a bodily movement depending on which circle of interpretation one brings to light (though to the extent the term "action" enters the picture, some kind of sentience is at least implied). As to the question of whether or not historical evidence determines only one correct interpretation, temporal flow characterized in terms of infinitesimals implies that the number of novel interpretations that a particular historical object can generate is potentially inexhaustible. Stated otherwise, the inexhaustibility of the continuum implies that there are a potentially infinite number of interpretations that can be elicited from the same set of evidence.²⁵³ Not all interpretations are equally valid, of course, and the hope is that the reality of the object to which the evidence refers will, in its brute actuality, succeed in paring down bad interpretations over time and strengthening those that are accurate, with an ideal norm presumed as a unitary horizon that measures that object's interpretation (and indeed, though the object is only *intelligible* by way of Thirdness, it is *experienced* as Secondness in its otherness through its qualities of

²⁵² D'Oro, *A Companion to the Philosophy of History and Historiography*, p. 144.

²⁵³ This resembles the thesis from Pierre Duhem and Willard Van Orman Quine, which is that there are in principle an infinite number of theories compatible with any finite data set, an argument called the *undermining of theory by evidence*. The Duhem-Quine thesis also bears on the nested continua model in its assertion that no hypothesis may be made in isolation, and that there are auxiliary hypotheses (read: other circles not yet drawn) that function as background assumptions for the explicit hypothesis.

Firstness, a dynamic that holds even if the object is available to the imagination rather than the senses). Such an ideal norm of interpretation is not available to any one person's conscious awareness, since any interpretive norm, if made available to consciousness, *itself* becomes another object requiring another norm of interpretation, ad infinitum. This is no reason to deny that absolute Thirdness is real, however, and understanding it in terms of *hope* is rather an apt way of putting it.

These points are in line with what Peirce called *fallibilism*, which holds that it is impossible to know with certainty that any particular theory is true.²⁵⁴ Yet just because the certainty of a particular interpretation is impossible to achieve, it is still possible to believe that countless numbers of our ideas are true, and the presumption of their truth as habitual and indubitable is precisely what allows one to make a novel hypothesis at all. Moreover, just as it is possible that countless of our ideas may be true, so will one act on the presumption of their truth. This recalls Peirce's "Metaphysical Club" experiences during the early 1870's when he developed pragmatism in part from Alexander Bain's definition of belief as that upon which one is prepared to act, including interpretation within its definition of "actions."²⁵⁵ Peirce applied this point to history in the following passage:

The past is the store-house of all our knowledge...As for that part of the Past that lies beyond memory... the meaning of its being believed to be in connection with the Past consists in the acceptance as truth of the conception that we ought to conduct ourselves according to it (like the meaning of any

²⁵⁴ CP 1.13-14.

²⁵⁵ CP 5.12.

other belief). Thus, a belief that Christopher Columbus discovered America really refers to the future.²⁵⁶

It does not follow from these views, as Thomas Haskell has argued, that “sound opinion becomes that opinion which wins the broadest and deepest support in the existing community of inquiry; there is, according to Peirce, no higher test of reality.”²⁵⁷ Haskell’s claim is in fact quite wrong, for the simple inclusion of the word “existing.” For Peirce the final test of the soundness of opinion was not agreement among this, that, or any future existent community of inquiry, but instead consistency with the regulative hopes of inquiry’s end (what this thesis calls absolute Thirdness). Granted, such comments from Peirce as his claim that “a belief that Christopher Columbus discovered America really refers to the future” raise the possible criticism that he lacks a sense of the past *as* past. Yet if one recognizes that everything that *exists*, i.e. everything that acts upon one in its brute actuality of Secondness, actually stems from the past, however recent (whereas the present is the infinitesimal span within which interpretations emanate from Firstness), then it can be argued that the past is actually quite important in Peirce’s thinking.²⁵⁸ For the nested continua model, the effort to distinguish among various circles on the graph can be understood as an effort to distinguish among the different frameworks by which past actuality is rendered intelligible.

²⁵⁶ CP 5.459.

²⁵⁷ Haskell, Thomas L. *The Emergence of Professional Social Science*. London: Johns Hopkins University Press, 2000, p. 238-239.

²⁵⁸ In the same article that contained the quotation on Christopher Columbus, “The Nascent State of the Actual,” Peirce identified the past as the “existential mode of time” (CP 5.459).

Another common question among historians is the viability of using counterfactual arguments in historical interpretation, with counterfactual understood according to Elazar Weinryb's definition as a "subjunctive conditional that presupposes the falsity of its antecedent."²⁵⁹ To this question the nested continua model answers in the affirmative. Just as the presence of existent, vague continua sets contours of potentiality that condition the emanations of novelty in the form of moments of infinitesimal emergence, so may these continua set contours for vague speculations on what *would* have been had the emergence not unfolded as it had. As the existence of a general continuum X sets vague qualitative conditions for future emergent occasions such that any not-yet-encountered, less-general object Y, if it displays the quality of the X, may plausibly be hypothesized as within X's continuum, so might some *never-existent* scenario Y, so long as it is speculated to have occurred in existent, general historical period X, be constrained by the qualitative conditions of that period. To put it in less abstract terms, an example may be that the general historical period "Civil War-era America" is characterized by the quality of its distinguished gentlemen wearing top hats. If that is the case, which has been verified by photographs and countless descriptions from the period, then the historian is logically permitted to imagine that in the counterfactual scenario that John Wilkes Booth does not assassinate Abraham Lincoln, then it is overwhelmingly likely nonetheless that the distinguished gentlemen at Ford's Theatre would have still been wearing top hats that evening. There are limits to

²⁵⁹ Weinryb, Elazar. "Historiographic Counterfactuals." *A Companion to the Philosophy of History and Historiography*. Ed. Aviezer Tucker. Oxford: Blackwell, 2011, p. 109.

what might be imagined through counterfactual reasoning, of course, and the further one proceeds into the counterfactual historical scenario, the more vague its qualitative conditions must become, and also less generative of specific insights. Yet as an abstract question of logic, nested continua in its historiographical dimension fully endorses the viability of counterfactual logic.

Nested continua and philosophy of history

There are at least four features of the philosophy of history that nested continua brings to light: (1) reception history; (2) multiple modes of generality participating in a common historical event; (3) identifying and distinguishing among interpretive categories in history; and (4) the possibility of teleological readings of history. Turning first to reception history, this term is defined by Harold Marcuse as “the history of the meanings that have been imputed to historical events...[tracing] the different ways in which participants, observers, historians and other retrospective interpreters have attempted to make sense of events both as they unfolded and over time since then.”²⁶⁰ Reception history thus not only bears on a given historical object or event, but of its subsequent interpreted reception. In the most basic sense, a good historical interpretation is one that effectively captures a past moment, series of moments, or idea in its time, with “effective” taken to mean accurate or true (recalling the previous chapter’s definition of truth as the carryover of value from object to interpreter with respect to all three categories). Yet the interpretation also participates in trajectories of reception for the object of inquiry,

²⁶⁰ Marcuse, Harold. “Reception History: Definitions and Quotations.” Santa Barbara, CA: University of California Santa Barbara Department of History homepage (<http://www.history.ucsb.edu/faculty/marcuse/receptionhist.htm>), 2003.

and this process is about ascertaining the relationship between a continuum (the inception of an object or event in the historical past) and the successive degrees of emergence from such a continuum (its subsequent receptions), a process expressed with particular eloquence by Robert C. Neville in a passage that bears quoting at length, about the Parthenon:

At the time of its actual completion, the Parthenon was a glorious event for its architect and the citizens of Athens; that was its proper location in time and space; over the centuries, the Parthenon has been subsequently located in a continuity of other events, growing old, changing from a religious edifice to an armory and finally to a cultural monument; the temporally thick Parthenon is located through all those events, with its several changes having proper dates yet being taken up in subsequent events in its career; further, the originally completed Parthenon has been variously located in the memories, drawings, and reflections of those who have seen it and visited its precincts, undergoing many changes by virtue of being conjoined to representations of itself in human experience (even though the architect has been forgotten!); there is neither a conceptual difficulty nor an experiential one in recognizing that the Parthenon's original glorious completion is fully real as objectively past while also located in multiple events of the temporally thick continuity of the building and of its enjoyment by admirers.²⁶¹

The succession between the “temporally thick” Parthenon and its continuity of receptions across the centuries is, in terms of the nested continua model, that of the succession between the outermost in a nest of continua that includes the entirety of its subsequent interpretations as trajectories. The circle labeled “Parthenon” provides a framework by which all subsequent receptions are to be understood, including both receptions of previous receptions and the conditions of potentiality for future receptions. Though one could very well re-draw the circles to place “Parthenon” as some smaller circle within some other type of category (e.g. classical

²⁶¹ Neville, *Recovery of the Measure*, p. 173.

antiquity), insofar as one aims to find meaning in this ancient structure, the physical rendering of its reception in terms of nested continua is helpful in that it allows one to trace divergent trajectories of historical interpretation and yet retain sight of the object that initiated the trajectories. There is no reason to think that the object that was the Parthenon is thereby inaccessible or excluded from insight because of its transmission across these potentially innumerable intervening layers; rather, the rendering of these layers explicitly allows one to gain clearer sense of the frameworks through which the objects is being interpreted.

The nested continua model also allows one to make the broader point that, not just the receptions of historical objects, but the objects themselves participate, in their existence, in many different levels of generality, some of which may not emerge until generations or even centuries later, others which exist simultaneously. Peirce himself recognized this point in discussing an imagined wink from Napoleon in his bedchamber as a historical moment of infinitesimal portentousness:

But what say you to the myriad details of Napoleon's life of which no vestige remains—his having winked, let us suppose, one night when he was in absolute darkness...You speak of a wink as if it were a small event. How many trillions of corpuscles are involved in that action, through how many million times their diameters they move, and during how many billions of their revolutions in their orbits the action continues, I will not undertake to calculate. But certainly you cannot yourself think that so vast an operation will have had no physical effects, or that they will cease for ages yet to come.²⁶²

From something as small as a wink in a dark bedchamber to, say, the vast encompassments of the Roman Empire, the markings/circles of the nested continua model can be drawn or redrawn by way of abduction (albeit within certain

²⁶² *CP* 8.195.

deductive limits) to better reflect the imaginative situation of a given moment. Yet the ontological unity of these different levels of generality should be understood as constant throughout. This is to say that any continuum within a nest of either historical objects or subsequent interpretations is possessed by the same intrinsic blend of Secondness, mediate Firstness, and degenerate Thirdness discussed in the preceding chapter. For historical understandings, this ontological unity allows that not only the actions or thoughts of an individual person possess a kind of personality; social groups, institutions, and even entire epochs are qualitatively unique and “personal” also.²⁶³ Raposa has observed the same point, holding that “it is no less accurate to identify a social entity or even the universe itself as personal than it is to label one’s neighbor or oneself.”²⁶⁴ By recognizing within history an ontologically common field across varying degrees of generality, the nested continua model aims to accommodate a powerful number of explanatory frameworks for historical events of multiple kinds.

A further benefit of rendering the reception history of a given historical object in terms of nested continua is that the visual arrangement of the nest allows one to distinguish among those trajectories of reception that have been more and less successful at creating guiding habits for interpreting that object. A nice metaphor here is that of the rings of a tree trunk, for just as one observes in each ring the atmospheric conditions of each year of a tree’s growth, so do the rings on

²⁶³As Zdeněk Vašíček has accurately pointed out in his article, “Philosophy of History,” the smaller the number of generalities and structures in historiography, the more the philosophy of history is subject to style and organization (Vašíček. *A Companion to the Philosophy of History and Historiography*, p. 31).

²⁶⁴ Raposa, *Peirce’s Philosophy of Religion*, p. 53.

the nested continua graph reveal varying degrees of success regarding subsequent interpretations of a given historical meaning. Historical interpretations that are particularly successful are those unconsciously condition one's reception of the object, in which case one may draw this category as a circle *around* the historical object instead of as part of the nest within it. For example, when one looks at the ceiling of the Sistine Chapel and thinks "Italian Renaissance," the visual effect that reaches the eye—or rather, the interpretive imagination that renders that which reaches the eye intelligible—passes through a nest of associations that, while identifiable as part of a trajectory of receptions for the Sistine ceiling, have also become part of the general reception of "Italian Renaissance." During the years that Michelangelo painted the ceiling between 1508 and 1512, no one had ever heard of the "Italian Renaissance," just as his painted ceiling was not yet an object of historical inquiry, renowned as it was. The historical period designated "Italian Renaissance" did not come about until three centuries later, when Jules Michelet coined the term *renaissance* for the period and Jacob Burkhardt developed it as a general category of historical understanding. Is "Italian Renaissance," then, real? The answer is a presumptive yes, and insofar as its reality is strengthened and developed in becoming habitual for further interpretations, not just of the Sistine ceiling, but of other phenomena possessed of similar qualities (e.g. the art of Raphael or Titian, the life of Cosimo de Medici, etc), then when one looks up at that ceiling and thinks "Italian Renaissance," then one is actually experiencing the Renaissance as an object of qualitative perception, looking through that ceiling, as it

were, to the broader circle of Renaissance that may be drawn around it.²⁶⁵ If it should turn out that there neither *is* nor *was* really any Italian Renaissance, then at least bringing it to light as a circle on the graph in relation to others with the nest of reception histories is the first step toward establishing the falsity of its claims in relation to that which it purports to render intelligible.

These points are not intended to substitute for the professional practices of historians. Indeed, the constraints that a given hypothesis must account for the evidence at hand, and at least attempt to place the hypothesis within broader continua defined in terms of the time period in question, subsequent time periods, adjacent geographic zones, etc, and respect the aesthetic satisfaction that comes from venturing an interpretation that seems to achieve all this, gives truth to the claim by Murray Murphey that “although there is no formal abductive logic that will lead us from a given set of data to the best explanatory hypothesis, when an investigator has mastered the data thoroughly, she will be in a position to recognize an explanatory hypothesis upon meeting it.”²⁶⁶ Yet once the interpretation has been averred, it has become part of the trajectories of reception with regard to its object, and lives or dies in relation to those others as well as in relation to the object. The meaning of an interpretation in historiography is the receptions it shapes in relation to its object presumed as a real entity. A good work of history will contribute to the

²⁶⁵ It may be taken as a sign of a successful historical interpretation when subsequent interpretations begin to derive subcategories from it. For example, in distinguishing between the *Venetian* and the *Florentine* Italian Renaissance, the truth of “Italian Renaissance” as a whole is assumed. Perhaps an even more important sign of a given interpretation’s success is when it becomes the basis for disagreements that presume its truth, as was seen in the postmodernism/historiography debate regarding Kantian foundationalism.

²⁶⁶ Murphey, *Truth and History*, p. 177.

settling of opinion about its subject with regard to a community of inquirers, and the greater number of interpretations it shapes, the greater is its concrete reasonableness—"Italian Renaissance" being an example of a very successful historical interpretation. As T.L. Short has put it, it is the habit itself, and not a concept of it, that is the ultimate interpretant of a concept.²⁶⁷ Still, not all habits are good, and returning habits to awareness in relation to that which they explain, even provisionally or hypothetically, for the sake of creating *new* habits is a viable function for nested continua.

A fourth area concerning a Peircean philosophy of history is its recognition of the possibility of teleological development across time. Teleology in historiography has not found much favor among latter day historians. Yet as Meno Hulswit has pointed out, much of the aversion of contemporary philosophy toward teleology is based on the view that teleological explanations imply final causes that are concrete future events.²⁶⁸ For Peirce, however, teleology applied to metaphysical generals, which are dynamic; they are tendencies to grow. This process of growth is neither strictly deterministic nor strictly chaotic. As Peirce put it;

Synechism...will insist that all phenomena are of one character, though some are more mental and spontaneous, others more material and regular. Still, all alike present that mixture of freedom and constraint, which allows them to be, nay, makes them to be teleological, or purposive.²⁶⁹

It is true that Peirce understood the passage of time to bear some teleological purpose, and that this purpose applied to history as well. But he also recognized

²⁶⁷ Short, *Peirce's Theory of Signs*, p. 58.

²⁶⁸ Hulswit, Menno. *From Cause to Causation: A Peircean Perspective*. London: Kluwer Academic Publishers, 2002, p. 76.

²⁶⁹ *CP* 6.570.

that no one could know precisely what that purpose is, and that “We are all putting our shoulders to the wheel for an end that none of us can catch more than a glimpse at that which the generations are working out.”²⁷⁰ This is because Peirce’s understanding of evolutionary development is characterized in part by an ineluctable element of chance disruption, which in the *Monist* series he referred to as *tychism*, or evolution through chance.²⁷¹

Nested continua: history and time

For the sake of the effort to establish an analytical unity between Neville’s and Ochs’s theological projects in the chapter to follow, it is important to be clear on the specific relationship between history and time as nested continua. Time is defined as a continuous duration enveloping the three modes of past, present, and future, and as the most abstract framework that is intelligible to the human mind with regard to understanding sequential processes (history, for its part, is defined as the sum of meanings handed down from the human past since the advent of writing), is probably the widest circle that can be drawn on the graph. Peirce himself described time in precisely the sense in which it is to be understood on a graph of the nested continua model, in a paper entitled “Circular Continua; Time and Space:”

Take, for example, Time. It makes no difference what singularities you may see reason to impose upon this continuum. You may, for example, say that all evolution began at this instant, which you may call the infinite past, and comes to a close at that other instant, which you may call the infinite future. But all this is quite extrinsic to time itself. Let it be, if you please, that evolutionary time, our section of time, *is* contained between those limits. Nevertheless, it cannot be denied that time itself, unless it be discontinuous, as we have every reason to suppose it is not, stretches on beyond those

²⁷⁰ CP 5.402n2.

²⁷¹ CP 6.102.

limits, infinite though they be, returns into itself, and begins again. Your metaphysics must be shaped to accord with that.²⁷²

If Peirce is correct in understanding time as such a continuum, there are at least three points that follow with regard to the nested continua model. The first is that time may be prescinded from any other marking on the graph, since as intrinsically more general (and vague) than other determinate entities, and as such may be deduced as always drawn as a circle around whatever else exists.²⁷³ The second is that time *as it is experienced*, as a sense of change, cannot itself be rendered on the graph. As such, *change* itself cannot be rendered upon the graph, which is after all a two-dimensional space, and so change is to be understood in terms of infinitesimal emergence. The third point is that time, as a continuum drawn far out from the graph's center, is almost entirely unidentifiable in terms of its aesthetic qualities of feeling, and, conversely, almost entirely identifiable in terms of its capacity for rendering other things intelligible.

With respect to Peirce's writings, there are at least three reasons that he understood time in terms of intelligibility. First, temporality is what renders semiotic interpretation intelligible, as it is the mediator between past and future selves. Peirce acknowledged this point in the following passage from 1905's "What Pragmatism Is:"

A person is not absolutely an individual. His thoughts are what he is "saying to himself," that is, is saying to that other self that is just coming into life in

²⁷² CP 6.210.

²⁷³ It is true that different cultures have expressed different definitions for time throughout history, understanding it in terms of linear progress, cyclic existence, or according to contemporary string theory, merely a dimension among several higher dimensions. Yet insofar as time is defined as the outermost horizon within which the human imagination can apprehend change, so is it to be always drawn as the graph's outermost circle.

the flow of time. When one reasons, it is that critical self one is trying to persuade; and all thought whatsoever is a sign, and is mostly of the nature of language.²⁷⁴

Time thus permits the continuity of interpretations that constitutes one's consciousness. A second reason for the indispensability of time is the sequential process of abduction, deduction, and induction that is necessary for inquiry to obtain and secure new forms of information as applicable to the world in a true way.²⁷⁵ For in venturing an abduction, one is essentially saying "if Y were true, then X would be explained." The hypothesis, in its element of novelty, arises in a moment of infinitesimal duration such that one is not always even aware of having made an abduction, but its intelligibility and testing requires a span of time, as it is necessary to deductively extend the guess beyond its initial moment of arising and inductively test (if possible) the replicable nature of the guess in further contexts, both of which depend on a continuity of temporal duration. A third reason for the indispensability of time in Peirce's work is the way in which vague concepts are specified by means of the flow of time from present to future.²⁷⁶ The moment an object is interpreted, that object cannot both be X and not X. Considering the relationship between that moment and some future moment, however, it becomes possible for a vague term to permit simultaneously contrary meanings that *become* more specific across temporal continuity.

Regarding the nested continua model, temporality is necessary for intelligibility of vagueness, but the *logical* meaning of vagueness need not be

²⁷⁴ EP 2.270.

²⁷⁵ CP 5.600.

²⁷⁶ CP 1.412.

confined to temporality as exhaustive of its meaning. This is to say that one may hypothesize a continuum—or multiple continua, if one wishes, as with the multiple dimensions of string theory—of vagueness that extend *beyond* temporality, while yet recognizing that it is only through time that such notions are to be made intelligible to us. It is possible for history to be related to time in the manner of the relatively specific to the relatively vague in such a way that the vague is simultaneously present alongside the specific (at different orders). This point on vagueness and relation will be important when considering the relation of eternity as a vague counterpart to temporality. As for the nested continua of time and history, temporality is indeterminate relative to history, but is that which renders history itself more determinate. With respect to history, the temporal continuum points to the finitude of human cultures and communities. As with other forms of human interpretation, temporality renders history intelligible, as it imposes a continuous measure by which events in time may be compared.

Although Peirce's understanding of infinitesimals was raised earlier in this thesis, a bit more might be presently said as to how such processes, as expressed in Peirce's *Monist* series, relate to the continuity between past and present modes of time. Considered temporally, what is at issue in Peirce's notion of the infinitesimal is the connection between a past idea and what is immediately present to consciousness. For Peirce, consciousness does not embrace a present idea in a discontinuous interval of time. If it did, we could have no direct access to past ideas, for each idea would be contained within limits. Instead, Peirce insisted that "the present is connected to the past by a series of real infinitesimal steps, and through

an infinitesimal interval”—meaning through a series of infinitesimal branching points of continua giving rise to new continua.²⁷⁷ During such an interval, “we directly perceive the temporal sequence of its beginning, middle, and end...in the way of an immediate feeling.”²⁷⁸ By way of the emergence from a vague temporal continuum from which the possibility of semiotic and temporal creativity arises, such emergence is possible, as Rosenthal has argued, “only because of the way in which continuity allows for traces of the past as possibilities for present creativity, possibilities that are ‘there’ in the present and stretch into the future.”²⁷⁹ Through such emergent continuities and within the limits of vague potentiality set by innumerable layers of existent continua, the universe is growing and developing.

This process of emergence by way of infinitesimals is precisely what was described in the preceding chapter in terms of interpretations that emanate from the center of absolute Firstness as pure possibility. Peirce said much the same thing in the following passage:

Time has a point of discontinuity at the present...Although the other instants of time are not independent of one another, independence does appear at the actual instant. It is not an utter, complete independence, but it is absolute independence in certain respects. Perhaps all fortuitous distribution originates from a fortuitous distribution of events in time; and this alone has no other explanation than...an absolute First.²⁸⁰

Peirce’s choice of words in this passage was not ideal. The “discontinuity” of the present is better understood not in terms of *time*, but rather in the encounter of novelty and chance within an infinitesimal point of an existent continuum that

²⁷⁷ CP 6.109.

²⁷⁸ CP 6.110.

²⁷⁹ Rosenthal, Sandra B. *Time, Continuity, and Indeterminacy*. Albany, NY: SUNY Press, 2000, p. 126.

²⁸⁰ CP 6.86.

generates a discontinuity within a “temporally thick” present. These emanations of chance novelty render the objects within an interpretive framework intelligible to some perceiver and, in doing so, contribute to the concrete reasonableness of that framework. In her work, *Charles Peirce’s Pragmatic Pluralism*, Sandra B. Rosenthal articulates how the lived experience of time as continuous is precisely what allows Peirce to posit real continua instead of nominalist concatenations of discrete instants (another alternative would be unchanging, ideal essences):

One may, if one wishes, ignore [the] percipuum of the course of time and insist on interpreting time as a series of knife-edged moments, and, along with this, one may insist that predictability is nothing but the regularity of such moments, decrying the meaninglessness of the assertion of any supposed causal relatedness or genuine potentiality or real generality. Indeed, in taking away the durational present, in reducing the process of lived time to a series of knife-edged moments, one has taken away the basis for the primitive epistemological “feel” of continuity.²⁸¹

It is important to recognize that the meaning of “interpretation” in this sense need not include a human perceiver, as there is no reason to assume that these processes, as real, are not independent of what any one person imagines them to be. Yet Rosenthal is right to point out that processes of present emergence are not to be described as a sort of “knife edge,” discontinuous from actualized and inchoate moments, from past and future, but rather is a temporally thick infinitesimal present that *includes* the emanation, the reaction, and the emergence of novel interpretation (emergence that, spatially understood, also interacts with an existent circle at an infinitesimal point on its circumference) within itself, and is precisely the means by which change-as-process may be understood to occur. As a given

²⁸¹ Rosenthal, *Peirce’s Pragmatic Pluralism*, p. 69.

continuum comes to include more emergent continua within its circle, it gradually becomes more general, attachable to an ever greater cardinal number of specific cases. In terms of the nested continua graph imagined across time, then, there is a sense in which circles gradually expand along with such increasing generality.

With respect to the three modes of time, the future refers to interpretive emanations that have yet to become actualized, which are set by the conditions of potentiality determined through existent continua. The present refers to the infinitesimal processes mentioned above. The past refers to the sum of the actualized existents on the graph, which Peirce describes as follows:

The Past consists of the sum of *faits accomplis*, and this Accomplishment is the Existential Mode of Time. For the Past really acts upon us, and *that* it does, not at all in the way in which a Law or Principle influences us, but precisely as an Existent object acts. For instance, when a *Nova Stella* bursts out in the heavens, it acts upon one's eyes just as a light struck in the dark by one's own hands would; and yet it is an event which happened before the Pyramids were built.²⁸²

There is a sense in which, as one moves from continua nearer to the center towards those further out, one is actually looking at frameworks of interpretation that emerged further back from within the past (which is not to say that these further-out frameworks cannot instantiate novel emergent interpretations; they just do not do so as often, which may in part explain Peirce's choice of the term "concrete reasonableness"—put otherwise, these outer layers may be described as habits that have become more ensconced). Paradoxically, one is also looking out into an increasingly vague future. Understanding these points in relation to the spatial rendering of Firstness, as pure feeling at the graph's center, and the source of

²⁸² CP 5.459.

intelligibility as Thirdness, that becomes successively more “pure” and also rarefied as one moves further out, goes some distance toward explaining Peirce’s cryptic claim that as ideas spread, “they lose intensity, and especially the power of affecting others, but gain generality and become welded with other ideas.”²⁸³ Temporality itself is the means by which these modes are collectively rendered intelligible, though “time” as an object of the imagination is simply another circle on the graph, albeit the largest circle most of us can imagine.

Turning now to history, this is the outermost framework within which one can understand what Peirce called the normative sciences of logic, ethics, and aesthetics, which is to say the largest framework available for understanding human intentionality as lived from within consciousness in all its richness of feeling, action, and understanding in such a way that does not venture into metaphysics in such a manner as philosophy or theology.²⁸⁴ History conditions one’s understandings of time, and is also the continuous framework within which a potentially inexhaustible

²⁸³ CP 6.102. Understanding the source of intelligibility as spatially rendered at the nested continua graph’s perimeter is not to assert that existent continua at higher levels of generality (i.e. further out) are objectively more intelligible; rather, from the point of view of the interpreter near the center, they are objectively vague and comparatively indeterminate. The continua closest to the center (i.e. the objects that surround one’s day-to-day experience) are in some sense the *most* intelligible, as these have the greatest number of interpretive frameworks through which to be understood. This is in line with why it becomes increasingly difficult to determine the question of “why” something happens at higher and higher levels of explanation, and there is a sense in which these higher levels more closely relate to Aristotle’s final causality (as opposed to efficient causality). Why did the cat chase the mouse? Because he wanted to eat it, and because felines are instinctually prone to chase mice, and because the cat’s owners wanted to have a cat in the house to get rid of pests, and because both are gravitationally bound to the earth, etc. Why does time exist? Harder to say.

²⁸⁴ CP 5.36. It is true that virtually all of the natural sciences pronounce upon topics at a greater level of generality than history, and that some of these sciences do so in a manner directly related to human intentionality (e.g. neuroscience). Yet it is part of the very methodologies of these disciplines to exclude questions of aesthetics, ethics, or logic as part of the meaningful life of human beings as *persons*. Archaeology might be an exception, inquiring into human life in similar manner as historiography, despite the fact that the analytical field of archeology predates what is commonly understood as history, which is to say before the advent of written texts.

plurality of human cultures has been enacted. In a sense, time accommodates a potentially infinite number of separate potential histories, and one can see in the various understandings of “history” across cultures and time periods what some alternatives to our own sense of history look like. For the Israelites of the Old Testament, for example, history was the story of a particular group overcoming a particular problem. For members of the middle class in nineteenth century Britain, it was an indefinite march of progress for people across the world. For practitioners of Mahayana Buddhism, history is the sum of misperceptions about the nature of reality, a cyclical system of torturous risings and fallings between realms that is ultimately to be transcended with proper meditative understandings. Yet for the sake of each of these perspectives to be collectively intelligible to some interpreter, “history” is the interpretive circle to be drawn around them (with history in this sense understood as everything that has occurred in the human past since the advent of writing). So conceived, history thus performs both stabilizing and destabilizing functions. With respect to specific cultures and traditions, as the indeterminate continuum in relation to which specific cultures and traditions may be identified as continuous, it is stabilizing. With respect to the fact that, although cultures and traditions are continuous with history, applying “history” as an interpretive framework shows them to be discontinuous with respect to *each other*, it is destabilizing, as the previously examined linkage between historicism and nominalism attests.

Recalling the sense in which Peirce’s understanding of metaphysically general potentiality allows for teleological explanations without denying absolute

chance or reducing teleology to determinism, as well as the sense in which categories of historical interpretation—e.g. Italian Renaissance—as they become the basis for further explanatory categories and hypotheses become less amenable to being dislodged from their objects of explanation by chance disruptions, it is possible to understand history in terms of Peirce’s claim that concrete reasonableness is ever growing. In the following passage, Peirce extolled historiography in relation to concrete reasonableness as a regulative hope of inquiry:

I may be asked what I have to say to all the minute facts of history, forgotten never to be recovered, to the lost books of the ancients, to the buried secrets. *Full many a gem of purest ray serene/ the dark, unfathomed caves of ocean bear/ full many a flower is born to blush unseen/ and waste its sweetness in the desert air.* Do these things not really exist because they are hopelessly beyond the reach of our knowledge? ...To this I reply that, though in no possible state of knowledge can any number be great enough to express the relation between the amount of what rests unknown to the amount of the known, yet it is unphilosophical to suppose that, with regard to any given question, investigation would not bring forth a solution to it.²⁸⁵

History cannot allow one to know with precision anything that will happen tomorrow. There is nothing inevitable about it, and even the more plausible predictions have the possibility of going awry by some chance conflagration. Yet as a given historical subject recedes into the past, and as various interpretations of that subject compete, a synthesized version does tend to emerge. To understand the nature of such a synthesis in terms of history, it can be contrasted with what might be called the *frozen infinity*.

²⁸⁵ CP 5.409.

In terms of the nested continua graph, the frozen infinity might be imagined as an infinitesimal point on the “underside” of the circle whose object is the continuum of history. Left to itself, such a point remains what Leon J. Niemoczynski has called “a complete immersion in pure quality,” undistinguishable from the continuum where it resides.²⁸⁶ Though the following instruction is not fully realizable, written as it is in text and likely addressed to a reader possessed of some prior knowledge of the event in question, take as an example the infinitesimal moment in which John Hancock’s pen made contact with the fibers of the Declaration of Independence on July 4, 1776. Without an act of interpretation, this moment would be a universe unto itself, a field of events locked in simultaneous transfixion. Every entity would be exactly as important as all the others, which is to say that no privileged relationships or meanings could exist. Now of course some relationships in a given historical moment inevitably emerge as more significant than others—Hancock’s pen was undoubtedly more significant than the type of molding that ran along the ceiling of the room, say. But what must be remembered is that the significance in such relationships is only to be discerned afterwards, that is, after the relationship has played itself out as effective across a sequence of subsequent events. Not only does this unfolding of historical significance manifest itself across time; it also entails a person positioned down the historical “line,” who receives certain information about the past, observes how such information relates to his or her perception of the present, and thus discerns which events were more important than others. As such, historians are *participating* in the growth of

²⁸⁶ Niemoczynski, Leon J. *Charles Sanders Peirce and a Religious Metaphysics of Nature*, p. 39.

concrete reasonableness through their creation of meaning in an ongoing process. To put this process in historiographical terms, when writing history, obviously all of the continuum of the past cannot be captured in a book or series of books. Even if it could, the fact that history is not finished yet would mean that any work—or any specific series of works—is subject to future correctives, and that the time of writing is barely more worthy as a vantage point than the time being described. Yet just because a work of history does not in any sense exhaust the meaning of the event it sets out to analyze, and the potential for the historian and his or her life remains necessarily incomplete, this is not to say that historical interpretation is ephemeral.

Peirce's categories provide an instructive means of understanding why this is the case. The historical imagination involves two fundamental movements, each of which proceeds from Firstness to Thirdness. The first movement refers to the infinitesimal process of the temporally thick present, which, as described above, comprises the emergence of interpretation from the center of absolute Firstness and, in reflecting off some existent continuum, generates a novel interpretation of an existent object. Regarding history as an existent continuum, when the historian undertakes to write about some aspect of history, there is any number of potential circumstances within which such an act may take place, to say nothing of the range of potential interpretations that may arise from such an act. This all characterizes Firstness. Yet the moment this process begins, the historian proceeds on actual distinctions between present and past, between *this* time, right now, and *that* time, suggested by the evidence at hand. Moreover, the evidence itself presents its own set of operative, actual oppositions: this manuscript, that portrait, this implication,

that suggestion, etc. This all characterizes Secondness. Yet to cogitate is to synthesize, to pull a collection of specific suggestions and competing inclinations into a single mental notion of that past time, in which, to the extent that this mental notion is true, some subset of history is manifested intelligibly in the present apprehending consciousness as another circle upon the nested continua graph. This all characterizes Thirdness. Were analysis to cease here, one would be left with an understanding of the historical imagination akin to Collingwood's reenactment thesis. Yet there is a second movement, also understood in terms of Peirce's categories, and it is this movement that separates a Peircean philosophy of history from that of Collingwood and brings it more in line with pragmatism. At the same time the historian has generalized a set of data to imagine a past moment, has drawn a new circle upon the graph, this synthesized mental image has become another manifestation of potential Firstness. To the extent that this interpretation is acted upon by the historian—i.e. written down or otherwise expressed for others to see—it becomes existent Secondness, and what was once an interpretation has become another interpretive framework, Thirdness, which enters among the trajectories of nested continua as circles upon the graph. So the process continues.

It should be stressed that history, as an interpretive framework, need not always be understood as a continuum directly in relation to time. Most historical questions, in fact, never enter into explicitly temporal or metaphysical discussions, and should be resolved along the lines practiced by mainstream historiography, which is to say by way of archives, evidence, research, and history books that enter into the popular imagination. Yet as the errant binary among the

postmodernism/historiography debate displayed, there are some questions concerning history that *do* require an explicit discussion of its relation to time, and another will be the particular nest of continua to be explored throughout the remainder of this thesis. This is the simple sparse sequence comprising “individual,” “faith tradition,” “history,” “time,” and “eternity,” the clarification of which is necessary to achieve the desired analytical unity between the theological projects of Robert C. Neville and Peter Ochs, and which will be shown to generate a range of theological insights of its own. For now, it might simply be admitted that the nested continua model allows for history to contain infinite possibility and yet logically be shaped by something beyond it as well.

Chapter Three: Trajectories: Robert C. Neville and Peter Ochs

The complexity of the divine life is that it embraces all of the person's moments in all three modes of time. In a quite literal sense, then, God embraces us as we face the future in every moment, as we decide and enjoy the immediacy of each moment as present, and also as we have run the course. This is the eternal life in which we exist in God, and it is as real at any time during our lifetime as it is after death...The eternity of a person's life consists in the fact that any part of that life, or the whole of it, exists eternally in the divine life. This last point is what has the religious power.

*Robert C. Neville, A Theology Primer*²⁸⁷

[Post-liberal theologians] are not critics of modern or premodern civilization; these civilizations are constitutive of their own "flesh"—their assumptions, languages, and sources of belief. They are critical only of efforts to repair errant social and religious practices today by reapplying rules of reform that were shaped specifically to meet the needs and concerns of an earlier age, modern or premodern.

*Peter Ochs, Another Reformation: Post-liberal Christianity and the Jews*²⁸⁸

This is the point at which theology enters the picture. Imagine for a moment the possibility that God is hiding between the "T" that starts this paragraph and the tiny dot that ends it. Amidst the contours of each letter, amidst spatially extended

²⁸⁷ Neville, *A Theology Primer*, p. 44.

²⁸⁸ Ochs, *Another Reformation*, p. 6.

black and white fields, and across imperceptible zones within which white shades over into black, the divine lies waiting in a place that is uniquely *here*. This divine “here” may seem illogical. Even if the (highly implausible) case could be made that God might somehow favor this space in distinction from all others, surely the nature of text is such that it bears no intrinsic “here,” its meaning rather moving along with each set of eyes that alights upon it. Yet God *can* be uniquely here, and in the extension of human intelligence to these words as a place of emergent meaning, processes are enacted that are structurally identical to those by which God creates the world. Created *ex nihilo* in an infinitesimal moment and diffused across innumerable existent nested continua, such emergence is bestowed with a normative value relative to which the sum of its actualizations might be measured. With the proper elaboration of the relationship of eternity to temporal things, the conditions of the possibility of God’s presence in a paragraph can be explained. This view draws from Robert C. Neville’s axiology of thinking, which understands thought as valuation, and values, as norms, to owe their status as determinate creations to an indeterminate creator whose gratuitous act of creation serves as their ontological ground.

Imagine, in turn, the habits of reasoning that render these words intelligible. These habits are implicit guides for interpretation, buried within a lifetime’s worth of memories and experiences that each reader brings to the text. The habits stem from the past, and are rooted in linguistic communities that share cultural practices developed across history. In the world’s great religious traditions, acquired habits guide the interpretations of texts believed to bear sacred meanings, helping a given

community apply its narratives of faith to the problems of everyday life. Should divergences of interpretation arise within a community, as they often do, attention to these habits—i.e. making them explicit—provides an objective means of uncovering the fissures from which competing interpretations arise, the identification of which may in turn uncover reparative resources without surrendering the norms that have provided that community with its distinctive identity. From a logical standpoint, this process—a dual movement of diagnosis and repair—is objective, predicated as it is on the assumption that errant binaries among competing interpretations indicate the presence of suffering that may be healed. Yet this logical objectivity is powerless unless its application respects the historical norms that provide a community with its deepest levels of repair. Without passing through these norms, the habits of reasoning remain obscure. This view draws from Peter Ochs’s Scriptural Reasoning, which understands the logic of Scriptural interpretation as a process of applying religious insights to their appropriate contexts, a process that is enhanced when members of different faith traditions interpret each other’s sacred texts together.

There are tensions between these two imaginative exercises, as well as limitations to each. On one hand, a given space has the potential to become the site of a divinely constituted emergent meaning, yet only if time is understood to be continuous with eternity. Formulated on such an abstract basis, this view runs the risk of seeming to neglect the problems of everyday life; there is a sense in which one might not be seeing the trees for the forest. On the other hand, a given text has the potential to alleviate problems of interpretation among religious communities,

yet as objectively beneficial as this alleviation may be—demonstrably so, as errant interpretive practices both cause and stem from suffering, and for the sufferer in such situations, the world is reduced to binary terms: pain/not-pain—there is a risk in this approach of allowing the narratives of one’s Scriptures to limit consideration to that which falls within this or that community’s narratives. To belabor the adage, the forest cannot be seen for the fact that Scripture makes no mention of it. The differences between the two approaches run deeper. Where the former sees time, the latter sees histories. While the former is unashamedly metaphysical, speaking of God in terms of determinacy and indeterminacy, chance and necessity, the latter finds its God in scripture, and is reticent, perhaps even suspicious of metaphysical claims that potentially lead to hubris and violence. While the former emphasizes semiotic creativity, describing emergent continua whose normative value is something genuinely new, the latter emphasizes semiotic transformation, digging deep to renew old symbols by applying them to new situations, new problems.²⁸⁹

The aim of this chapter is to point toward an analytical unity between Neville’s axiology of thinking and Ochs’s Scriptural Reasoning as trajectories of Peircean philosophical theology. While Chapter One established the nested continua model’s operative rules in relation to Peirce’s life and career, and Chapter

²⁸⁹ The distinction between semiotic constitution and semiotic transformation is one of the most prominent differences between Neville’s and Ochs’s respective writings. For example, Ochs writes: “Peirce’s theory of habit change suggested that the interpretation of symbols is a transformational, rather than merely constitutive activity—that is, that it establishes meaning by transforming prior meanings rather than by generating meaning *ex nihilo*; according to this theory, the concept of community displays different modalities, and we should be wary of reducing the concept to any one modality” (Ochs, “Charles Sanders Peirce,” *Founders of Constructive Postmodern Philosophy*. Ed. David Ray Griffin. Albany, NY: SUNY Press, 1993, p. 78). This differs completely from Neville’s view that creation *ex nihilo* is an ongoing process. Further differences between Neville and Ochs in terms of the presentation of their work and the scope of their inquiry will be treated in each thinker’s respective section.

Two directed the model toward understandings of history and time as nested continua, the present chapter will build upon these understandings in an effort to bring together Neville's and Ochs's theological insights, proceeding through careful critiques of Neville's sense of time and eternity and of Ochs's sense of individuals and historically-situated faith traditions. The chapter will begin by calling attention to two overlooked affinities between their projects: shared understandings of Peirce's logical vagueness, as well as compatible understandings of axiology, which Ochs calls the continuity between diagrammatic and corrective reasoning. This section will also highlight a divergence with regard to historicism and metaphysics (Scriptural Reasoning leans toward historicism, Neville's axiology quite explicitly embraces metaphysics). Following this, in respective sections comprising the bulk of the chapter, analysis will turn toward the status of history in Ochs's Scriptural Reasoning, then toward the status of time in Neville's axiology of thinking.

In fairness, to say that the respective imaginative exercises introduced above fully represent Neville and Ochs's writings would not be entirely accurate. Neville's work, for example, does not neglect the details and problems of everyday life, nor is Ochs entirely hostile to the idea of metaphysical claims (he qualifies his stance in saying that "we do not dismiss the search for unity, only the presumption of its finality"), and *certainly* not hostile to the idea of reaching beyond the narratives of one's own Scriptures.²⁹⁰ Particularly regarding the first of the two imaginative exercises, the assertion that God might be manifested in a paragraph as an emergent

²⁹⁰ Kepnes, Ochs, and Gibbs, *Reasoning After Revelation*, p. 17

continuum represents more of an appropriation of Neville's writings through the nested continua model than what one finds in the those writings themselves. Lest it be objected that this thesis is doing injustice to either of Neville's or Ochs's ideas in bringing them together as it does, the most basic defense is simply to say that it is not *them* but certain of their ideas that are the focus here; more specifically, the focus is Ochs's sense of history and Neville's argument for time and eternity (and how each reflects aspects of Peirce's work), leaving untouched the other areas of each thinker's work except insofar as they bear on history or time. The point is to provide a sense in which theological speculations can account for creation *ex nihilo* with respect to time and eternity, and also respect the dialogue between Scriptural traditions with an eye toward solving internal problems.

Overlooked affinities: the logic of vagueness and axiology of thinking

The most obvious commonality between Neville and Ochs—to many observers, perhaps the only commonality between them—is the fact that each is a theologian who cites Peirce prominently in his work. Aspects of each thinker's application of Peirce will be treated in sections dealing with Ochs and Neville individually, though for now, it bears mentioning that one of the most important Peircean influences they share is their mutual application of the logic of vagueness, and the connection of vagueness to axiology (with "axiology" understood as the study of value). Ochs and Neville each make constructive use of vagueness, respectively in terms of the vagueness displayed by a given text and the vagueness of the object of some metaphysical claims in relation to its specification through

cultural instantiations. The following passage provides a good sense of Ochs's understanding of logical vagueness:

A vague symbol may be defined with respect to this or that context of interpretation; the resulting definitions nonetheless display a species of indeterminacy that enable interpreters to draw lessons from one context to another. This is significant, as vagueness thus discloses a way of generalizing the results of inquiry without transgressing the limits of context-specific interpretation.²⁹¹

The following passage from Neville is likewise instructive:

Not only are metaphysical notions more abstract than those of religion and science, they are also vague with respect to them. Vagueness is not fuzziness but rather tolerance of ambiguity, confusion, and contradiction among the less abstract notions that might specify the vague ideas.²⁹²

Vagueness as Ochs describes it refers to hermeneutic vagueness, while Neville understands vagueness metaphysically. This fits in with the broader differences with regard to the scope and nature of Ochs's and Neville's theological projects.

Each sense of vagueness is also in line with Peirce's own texts. At times, as in the following passage, Peirce referred to vagueness in terms of communication, which has echoes in Ochs:

No communication of one person to another can be entirely definite, i.e., non-vague...Wherever degree or any other possibility of continuous variation subsists, absolute precision is impossible. Much else must be vague, because no man's interpretation of words is based on exactly the same experience as any other man's. Even in our most intellectual conceptions, the more we strive to be precise, the more unattainable precision seems.²⁹³

One also finds in Peirce examples of an overtly cosmological understanding of vagueness, which has echoes in Neville:

²⁹¹ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 9.

²⁹² Neville, *Eternity and Time's Flow*, p. 9.

²⁹³ *CP* 5.506.

The evolution of forms begins or, at any rate, has for an early stage of it, a vague potentiality; and that either is or is followed by a continuum of forms having a multitude of dimensions too great for the individual dimensions to be distinct. It must be by a contraction of the vagueness of that potentiality of everything in general, but of nothing in particular, that the world of forms comes about.²⁹⁴

The former passage was written in 1905, and the latter in 1898, and the difference in emphasis between them reflects Peirce's move from a period of grand claims in the service of system-building to that of pragmatism as a performance of repairing the claims of others. Given that Ochs has argued that Peirce's thought did not free itself of problematic foundationalist tendencies until after 1903, it is little wonder that he should prefer the pragmatist sense of vagueness to the metaphysical, just as Neville might (albeit less overtly in his writings) prefer the 1898 iteration.²⁹⁵

Yet there are several reasons why Neville's and Ochs's understandings of vagueness are in fact quite congenial. First, regarding their textual roots in Peirce's work, there is no reason to imagine that the Peirce of 1898 and the Peirce of 1905 are entirely discontinuous, or their respective understandings of vagueness incompatible; Ochs makes this point in holding that "pragmatism places itself alongside the pragmatism it corrects, rather than in dyadic opposition to it."²⁹⁶

While it is certainly true Peirce's pragmatist phase following 1905's "What Pragmatism Is" reflected steps toward a humbler, more performative (rather than foundational) sense of how his ideas might be applied, the writings of Peirce's last years continued to contain metaphysical assertions that had grown out of his earlier

²⁹⁴ *CP* 6.196. Peirce also argued at various points that the word "God" ought to be understood as vague to avoid contradiction (*CP* 6.199, 6.494).

²⁹⁵ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 144.

²⁹⁶ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 256.

understandings of continuity and realism—e.g. Peirce’s claims that “recognition of real possibility is certainly indispensable to pragmatism”²⁹⁷ and that “pragmatism could hardly entered a head that was not already convinced there are real generals.”²⁹⁸ Peirce’s logic of vagueness accommodates metaphysical as well as hermeneutic readings, a fact that is borne out in Ochs’s and Neville’s own texts. For example, in *Realism in Religion*, Neville describes vagueness as follows:

Peirce’s conception of vagueness and specification is an extraordinary tool for comparative theology...Comparison in theology has the logical form of finding a vague category under which all the candidates for comparison fall, and then specifying the category in different ways, summarizing how they contradict, agree, supplement, overlap or show indifference to one another.²⁹⁹

Neville’s reading of vagueness here does differ from that of Ochs (in addition to the metaphysical implication that Neville attaches to it, its goal of finding a category “under which all the candidates for comparison fall” is out of step with Ochs’s usage, if one understands such a category to be the neutral universal perspective rejected by post-liberal theology), yet his recognition of vagueness’s potential for interfaith dialogue at least speaks to Ochs’s own concerns.³⁰⁰

²⁹⁷ CP 5.527.

²⁹⁸ CP 5.503.

²⁹⁹ Neville, Robert C. *Realism in Religion*. Albany, NY: SUNY Press, 2009, p. 116-7.

³⁰⁰ Warren G. Frisina has identified three features of Neville’s understanding of vagueness with which Ochs might also agree: “(1) vague theories are mere hypotheses to be refined by further inquiry, rather than a category to imposed from above; thus, logically vague theories/hypotheses gain their power by setting a context that reveals the particularities of lived experience and allows those particularities to play back up the system; (2) vague theories have a capacity to comprehend competing claims among more concrete theories.” Frisina also points out that, for Neville, “vague theories operate on a level of abstraction that’s neutral with respect to the more concrete theories that they are capable of comprehending,” which Ochs would likely resist on post-liberal grounds because of its recognition of neutrality to abstraction (“Pragmatism, Logical Vagueness, and the Art of Comparative Engagement.” *Theology in Global Context: Essays in Honor of Robert Cummings Neville*. New York: T&T Clark, 2004, p. 166.).

Ochs's statements on vagueness might likewise be understood as compatible with Neville's. Emphasizing what he calls the "irremediable vagueness" of Peirce's pragmaticist writings, Ochs writes:

Irremediable vagueness is the modality of a text that appears first to be either errant or remedially vague but then proves to be neither. Resisting any correction, the text stimulates an interpretive pragmatic reading, according to which the text's *apparently* problematic words are irremediably vague symbols of a species of implicated meanings that can be defined clearly only at some given time for some community...These words implicate the reader in their interpretation.³⁰¹

When Ochs writes about irremediable vagueness in a text, he implies that vagueness is imbedded in that text in such a way as to only be specified through the actions that ensue upon an interpreter's encounter with that text. Though reticent to comment upon the metaphysical bearing of the world to which an irremediable text refers, it is not too much of a strain to suppose that an irremediably vague text bears on irremediably vague real objects, which insofar as such objects refer to metaphysical claims, is a point with which Neville would agree. Ochs himself makes this observation in holding that "the vagueness of percepts corresponds to the vagueness of predicates; the vagueness of the objects of perceptual judgments corresponds to the vagueness of subjects."³⁰² Without conflating the differences between vagueness as Neville and Ochs each understands it, what their two visions have in common is that vagueness is the logical form that tolerates mutual

³⁰¹ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 47. On this page, Ochs also refers to irremediable vagueness as the "second degree of textual implicature," which is the way in which vagueness in a given text implies corresponding interpretive actions that specify it. The nested continua model understands this sort of implicature as the way in which the graph's markings/circles are complemented by changes in an observer's interpretive habits.

³⁰² Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 211. Ochs here refers to Peirce's sense of vagueness as applied in the Existential Graphs, though there is no indication that he does not also assent to this meaning of the term also.

difference and allows for a reconciliation of such difference without reducing that which is distinguished to some unifying category, or to each other. The nested continua model hopes to make use of *both* Ochs's and Neville's senses of vagueness *as distinct, yet compatible*. In terms of the relationship of the markings/circles of the nested continua model refer to the lived experiences of the person who is interpreting the model, the markings/circles do indeed, as Ochs claims, "enable interpreters to draw lessons from one context to another." In terms of the relationship between outer and inner circles on the graph, vagueness applies to Neville's understandings of categories that serve as bases for comparison of that which is more specific.

The complementary understandings of vagueness between Ochs and Neville reflect an implicit compatibility with respect to axiology, in which to diagram something (thinking) is to correct it (valuing) with respect to some normative context of interpretation, which is the second overlooked affinity between Ochs and Neville. Intriguingly, Neville and Ochs both go beyond Peirce in his their respective understandings of axiology, quite likely doing so independently of one another. Although Peirce did discuss thought in terms of axiology (without explicitly using that term), his mentions of axiological topics appear less often than his mentions of vagueness.³⁰³ As such, Ochs's and Neville's respective understanding of axiology,

³⁰³ There is undoubtedly an axiological implication to Peirce's understandings of the normative sciences, in which logic is understood as supported by ethics, which is supported by aesthetics. Peirce made this link explicit in the following statement: "Since pragmatism makes the purport of thought to consist in a conditional proposition concerning conduct, a sufficiently deliberate consideration of that purport will reflect that the conditional conduct ought to be regulated by an ethical principle, which by further self-criticism may be made to accord with an esthetical ideal...So, although I do not think that an esthetic valuation is essentially involved, *actualiter* ...in every

which are both essential to their projects, might be supposed to reflect the relevance of axiology to the *theological application of Peirce's philosophy*. It helps to take each thinker's understanding of axiology in turn. For Neville, axiology is one of the core features of his writings, as he devoted three full-length works (*Reconstruction of Thinking*, 1981; *Recovery of the Measure*, 1989; *Normative Cultures*, 1995) toward showing the implications of the claim that thinking is valuing, and that the fact-value distinction is a pernicious error. Neville sums up the heart of his axiology in the following passage:

If thinking is always some kind of valuing, then the paradigms of mathematical physics that separate facts from values and make values non-cognitive are rarefied abstractions that hide something of their own nature.³⁰⁴

Neville's axiology bears on some of the most important features of his thought. If thinking is understood as valuing, then truth becomes the carryover of value from object to interpreter.³⁰⁵ Neville's axiology merges with his metaphysical realism in that to be a determinate entity is to be an achievement of some value. Moreover, combined with his understanding of vagueness, entities that are of a higher level of vagueness are likewise normative and value-laden, and understanding these with respect to entities of a lower generality helps shed light on the many systems (e.g. historical, semiotic, biological, linguistic, etc) in which these less general entities participate.

intellectual purport, I do think that it is a *virtual* factor of a duly rationalized purport" (CP 5.535). As Michael Raposa has convincingly argued, this understanding of the aesthetic basis of logic would develop into an important aspect of Peirce's 1908 "Neglected Argument for the Reality of God" (*Peirce's Philosophy of Religion*, p. 102-103).

³⁰⁴ Neville, *Normative Cultures*, p. x.

³⁰⁵ *Ibid.* P. xi.

Ochs, for his part, does not apply the term “axiology” to his work in the same sense; in fact, this term hardly appears in his writings at all. Yet in certain important ways, the methodology of Scriptural Reasoning operates according to the same basic understandings as Neville’s axiology, though it is certainly presented in a different style. For to reject, as Scriptural Reasoning as a post-liberal project has done, the neutral standpoint of some general abstraction, is to fundamentally reject that there is some “fact” that all values must conform to. More than this, Scriptural Reasoning as Ochs sees it operates by way of the dialectic between diagrammatic and corrective functions, which is not the same as Neville’s claim that thinking *is* valuing, but it does entail that facts and values are continuous. Holding that “the diagrammatic-and-corrective reading one uses to repair pragmatic writing is the same reading one uses to prove its validity”³⁰⁶ and that one’s diagrams, “from out of the vague continuum of common sense...reify selective legislations that address some particular dialogue between theoretical resources and practical needs,”³⁰⁷ Ochs makes clear that axiology is in some sense inseparable from vagueness:

Corrective judgments interrelate problematic writings and corrective readings; diagrammatic judgments interrelate corrective but vague writings and clarified, corrective writings.³⁰⁸

Corrective and diagrammatic reasonings as Ochs sees them are linked through the performance of correcting a problematic text. For Ochs, then, simply using Peircean logic to correct a problematic text is not enough; the correction must occur *with respect to a particular interpretive community*, which supplies the context by which

³⁰⁶ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 277.

³⁰⁷ *Ibid.* p. 268.

³⁰⁸ *Ibid.* p. 255.

the correction acquires meaning and that which is vague is rendered specific. This diagrammatic-corrective, vague-specific dialectic presupposes an axiology, for if thinking were not also some sort of valuing, Ochs's method would be unable to perform its reparative function.

Before entering into the individual sections on Ochs and Neville, there is one further area in which they need be treated together, an area in which their views diverge. This is the distinction between metaphysics and historicism, an issue that, in raising the question of whether the meaning of human claims might bear on more than history, reflects some of the topics raised in the previous chapter, and which has been an ongoing subject of philosophical attention in recent decades.³⁰⁹ In Ochs's view, "the logic of vagueness reveals a dialectic of historicist and transcendental tendencies in conflict, a conflict that has not yet been resolved."³¹⁰ Neville likewise recognizes a historicist/metaphysics tension, though his response is much more unequivocal than Ochs's:

Historicism in one sense is undeniable: any thinking or intelligent action is a function of its historical setting...This is not to suggest, however, that historically conditioned thought cannot be about basic structures or metaphysical categories transcending its own and any historical situation... It is a silly limitation on thought to require that historically contextualized philosophy must restrict its topics to the interpretation of historical realities.³¹¹

³⁰⁹ This dialectic of historicism and metaphysics has taken various forms across the nineteenth and twentieth century. In his article, "Dispensing with Metaphysics in Religious Thought," Cornel West traces several of the threads of this dialectic (particularly in relation to pragmatism) and argues that, while legitimate *locally*, metaphysics should ultimately be placed, as for Collingwood, within historicity (*The Pragmatism Reader: From Peirce Through the Present*. Eds. Robert B. Talisse and Scott F. Aikin. Princeton: Princeton University Press, 2011, p. 403-406).

³¹⁰ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 248.

³¹¹ Neville, *Recovery of the Measure*, p. 51-52.

While respecting history as its own field of inquiry and an undeniable feature of interpretive identity, the nested continua model distinctly agrees with Neville's view, and much of the remainder of this chapter will set about showing why.

The status of history in Scriptural Reasoning

Along with David Ford and Daniel Hardy, Ochs founded the Society for Scriptural Reasoning in 1996. Scriptural Reasoning came out of Ochs's background in Textual Reasoning, a set of interpretive practices among a community of Jewish scholars who practice communal study of Scripture. As an interfaith dialogue model, Scriptural Reasoning has had considerable success both within the academy and in the wider public, its influence observable, among other contexts, in *The Journal of Scriptural Reasoning*, regular sessions at annual meetings of the American Academy of Religion, and the Cambridge Interfaith Programme. Reflecting its post-liberal influence, the sources for guidance in Scriptural Reasoning lie in communal, historically situated traditions rather modernist *a priori* deductions, which Ochs criticizes as the "effort to locate some truth claims independently of inherited traditions of practice, [intended] to serve as the basis of which to construct reliable systems of belief."³¹² Whereas modernist foundationalism has the effect of reducing the claims of faith tradition to a foreign mode of analysis, on Ochs's view the faith traditions themselves generate their own insights that then take on novel meanings by way of inter-communal conversation.

³¹² Ochs, Peter. "Philosophic Warrants for Scriptural Reasoning." *Modern Theology*. 22, 3, 2006, p. 466.

Faith traditions do not exist for Ochs in absolute isolation from one another—certainly this is not the case for Judaism, Christianity, or Islam—but each provides its own set of rules for repairing the problems of everyday life, and such rules are best observed among each faith’s Scriptures. Hence the reference to *Scriptural* reasoning in the movement’s name, which bears on two distinctive features of Ochs’s work: the centrality of the text, and the meaning of texts in relation to various readerships. As Ochs puts it: “what is indigenous to Judaism is the Torah, and the Torah is irreducible to the plain sense of any text; [yet] reading cannot be done ‘in general,’ or ‘for anyone,’ but only for someone: for some community of readers.”³¹³ As for the meaning of the term “reasoning” in Scriptural Reasoning, this refers to the structures of interpretation that are revealed when Scripture *itself* appears unable to perform its task of repairing everyday problems. These structures are forms of triadic logic, with the respective terms “everyday problems” and “sacred texts” mediated by way of a third term, “some particular community of interpreters.” The sources for the answers to life’s problems do not exist *for everybody all at once*, but *for this community*, and it is the hope of Scriptural Reasoning that members of *that* community, in sitting to read the scriptures of *this* community, might bring their own resources to bear in uncovering ameliorative patterns that members of *this* community might not otherwise have noticed.³¹⁴

The framework for understanding these communities is historical. Not only does history provide the conceptual horizon for the contexts within which traditions

³¹³ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 5.

³¹⁴ Rashkover, Randi. "Introducing the Work of Peter Ochs." *Modern Theology*, 24, 3, 2008, p. 442.

arise and take meaning, or, to put it in other terms, the matrix of linguistic referents through which the practices of a community become intelligible; regarding problems that mark a specific community's habits of interpretation in some specific time, historiography is also the mode by which the problems' roots might be uncovered, which is the first step toward pointing to possible solutions. Rather than addressing a problem, then, by creating some intellectual foundation that describes the conditions for its inquiry, Ochs's work requires the painstaking, but ultimately rewarding task of searching within a specific tradition's past to uncover how the problem first emerged, as well as how a member of that community might address it. The work begins with a process of recognition followed by a genealogical approach. Yet the question arises: if meaning is mediated with respect to different traditions, and if these traditions are identified in terms of their historical contexts, then how is the notion of *history* not itself tradition-bound in such a way as to deprive Scriptural Reasoning of the analytical tools just described, to the ultimate detriment of the communication *across traditions* upon which its practices play out? Moreover, if insights drawn from sources outside a given tradition risk the diminution of religious claims on their own terms, then how are such resources not prevented from being brought to bear in assisting members of a given tradition resolve a given problem, as indeed does Ochs with his importing of logic derived from Peirce's philosophy in the service of rabbinic reasoning?³¹⁵ These questions

³¹⁵ In their article, "The Unintended Consequences of Dixieland Post-liberalism," Robert P. Jones and Melissa C. Stewart describe the ways in which the post-liberal argument that evaluation based on sources outside a given religious tradition diminish that tradition on its own terms have been abused in the context of Southern American Protestantism, which has used this argument to insulate faith communities from criticism entirely (*Crosscurrents*, 55, 4, 2006, p. 506-522).

reflect a genuine doubt about the status of history in Scriptural Reasoning, and even if the proponents of Scriptural Reasoning might claim that seeing historical knowledge as tradition-bound does not put the interfaith understandings of its practices in jeopardy, some articulation of how historiography might uncover meanings that transcend particular traditions is nonetheless useful.

In 2002, Ochs co-edited, along with Nancy Levene, a collection of essays on Scriptural Reasoning entitled *Textual Reasonings*. In this volume, Ochs contributed an essay called “Talmudic scholarship as textual reasoning: Halivni’s pragmatic historiography,” which draws from the work of David Weiss Halivni to discuss the notion of a “pragmatic historiography.” Ochs distinguishes this sort of historiography from “plain-sense” historiography, which is addressed to a putatively general community of historians, by seeing pragmatic historiography as motivated by the problems of a specific tradition. Pragmatic historiography imports two dicta from rabbinic theology. As Ochs puts it:

[Pragmatic historiography] is a historiography that begins where the plain-sense evidence leaves off; its first dictum is “never to contradict the plain-sense,” alluding to the rabbinic dictum *eyn hamikre yotse m’dei peshuto*, “the text must not be let outside its plain-sense”...The pragmatic historiographer asks the documentary evidence to answer questions about the past that we cannot answer incontrovertibly, *but which are consistent with the evidence and which a given community of enquirers demands that we must answer if we are to put our text scholarship to the ends for which we have produced it*. Pragmatic historiography’s second dictum is therefore *al tifrosh min ha-tsibbur*, in the sense of “never to ignore the needs of the community,” which is also “never to forget that the texts make demands on us at the same time we ask questions of them.”³¹⁶

³¹⁶ Ochs, Peter and Nancy Levene. *Textual Reasonings*. London: SCM Press, 2002, p. 121.

It is apparent that, in importing the dicta for pragmatic historiography from his own rabbinic tradition, Ochs is attempting to practice what he preaches with regard to the tradition-mediated nature of one's beliefs. Indeed, he describes pragmatic historiography as "irreducible to the dichotomies modern academic scholars tend to draw between subjective and objective scholarship, or historiography and theological interpretation."³¹⁷ It is equally apparent that, with regard to the first dictum's not contradicting the plain-sense of a historical text, Ochs respects the methods of historiography as an objective discipline.

According to Ochs, these two types of historiography—plain-sense and pragmatic—are not only addressed to different audiences, but are to be evaluated according to different criteria. While the criteria by which a plain-sense work of historiography is to be judged is not made clear (presumably this is the extent to which a historical work contributes to future knowledge, with a vague notion of "future human beings," or perhaps "future professional historians" serving as the communities with respect to which the work takes meaning), Ochs is emphatic that a pragmatic historiography is to be judged on the extent to which it helps repair a specific problem that generated the historical inquiry. As he puts it:

[Pragmatic history] should be evaluated by what I will label its "overall pragmatic strength." This means its success, at once, in serving the performative demands of the texts under study, in enhancing the life of the everyday community that the scholar serves, in answering the specific questions that stimulated this scholarship and in offering what mathematicians would call a "beautiful theory"...But who can make judgments according to such criteria? Not everyone...[, but rather,] members of the sub-community of scholars that serves these practitioners.³¹⁸

³¹⁷ Ibid. p. 121-2.

³¹⁸ Ochs, Levene, *Textual Reasonings*, p. 126

From plain-sense historiography, Ochs finds the public standards of verification for historical interpretation; from pragmatic historiography, he finds the freedom to conduct historical research independently of the “semantics of any specific, antecedent community” of interpreters.³¹⁹ To talk of freedom in this way is not to remove all responsibility from the pragmatic historian, but rather to limit such responsibility to the community from which the historian’s concerns emerge.

Yet the relationship of pragmatic to plain-sense historiography in Ochs’s work remains unclear. In a chapter from 1993, “Charles Sanders Peirce,” from David Ray Griffin’s *Founders of Constructive Postmodern Historiography*, Ochs asserts that the pragmatic inquirer is “first, a historian...[and] second, a transcendental critic of a Kantian sort.” This demonstrates his belief in the primacy of establishing one’s historical context before examining what presuppositions about the world are necessary for a given community to express its claims, which rather resembles Collingwood’s understanding of the historical basis to metaphysics.³²⁰ What is missing, however, is a description of how the pragmatic inquirer is in *relation* to historiography as a “plain-sense” discipline. Elsewhere in the chapter, Ochs describes how a pragmatist is and is not “like a historiographer,” holding that yes, both offer explanatory theories that link certain effects to certain causes, but also that no, “unlike the historiographer, the pragmatist assumes that these causes

³¹⁹ Ibid. p. 140.

³²⁰ Ochs, *Founders of Constructive Postmodern Philosophy*, p. 71.

cannot be identified...with any discrete set of events or objects.”³²¹ On the basis of this rule of reasoning—“general historian identifies causes with a discrete set of events/objects” versus “pragmatic historian does not identify causes with a discrete set of events/objects”—Ochs does not distinguish between the two types of history in such a way as to clarify how one might understand historical meanings *across* different traditions, because he continues to imply a “one begins where the other leaves off” relation. Granted, one cannot logically act simultaneously on the beliefs that there are and are not causes that emerge from discrete sets of objects and events, and, as such, Ochs’s binary is valid. However, assigning a firm belief in discrete sets of objects and events to general historiography misconstrues what historiography has to be—though historiography certainly does this, it need not *only* do this—and is an artificially limiting means by which to view the discipline of understanding the human past.

Aside from Ochs’s chapter on pragmatic historiography in *Textual Reasonings* and his chapter for Griffin’s volume on constructive postmodernism, the text in which Ochs most thoroughly discusses historiography is in his recent work, *Another Reformation: Post-liberal Christianity and the Jews*. In a sense, this entire book is a work of pragmatic historiography, inquiring into certain aspects of the Christian tradition to argue that it is possible to affirm classical Christology while at the same time deny the doctrine of supersessionism, which holds that the Incarnation replaced God’s covenant with Israel with a covenant with the Christian Church. Dividing the relation between Jews and Christians into three historical periods—

³²¹ Ochs, *Founders of Constructive Postmodern Philosophy*, p. 38.

broadly stated, (1) a pre-modern, adversarial period; (2) a modern, or assimilative period, which attempted to reconcile Christians and Jews according to the liberal paradigm of universal reason, and; (3) since the mid-twentieth century, a post-liberal period, of which Scriptural Reasoning must be seen to be a part—Ochs identifies post-liberal Christian theology as the approach which is best suited to repair supersessionist exclusivity, and that even the best-intentioned liberal efforts result in generating the same errant binarism upon which supersessionism is based.³²² As Ochs puts it:

[Post-liberal theologians] are not critics of modern or premodern civilization; these civilizations are constitutive of their own “flesh”—their assumptions, languages, and sources of belief. They are critical only of efforts to repair errant social and religious practices today by reapplying rules of reform that were shaped specifically to meet the needs and concerns of an earlier age, modern or premodern. Their surprising discovery is that such efforts tend to display the same logical form, whether they are placed in the service of a rationalist or antirationalist, or a religious or a secular, agenda.³²³

Another Reformation is not only a work of historiography, but it relies in its arguments on a broad schematic of periodicity across the histories of Christianity and Judaism (pre-modern/modern/post-liberal), which Ochs employs with specific reference to sub-communities within contemporary Jewish and Christian theologians. By challenging not only the doctrine of supersessionism, but also the modes of reasoning by which supersessionism arises, the book implies that the logic of a historical event irremediably replacing another is specious at best. Likewise, since each previous “civilization” is constitutive of its own “flesh,” then history is

³²² In *Another Reformation*, Ochs analyzes seven theologians it deems as post-liberal: George Lindbeck, Robert Jenson, Stanley Hauerwas, Daniel Hardy, David Ford, John Howard Yoder, and John Milbank.

³²³ Ochs, Peter. *Another Reformation*, p. 6.

called for as the discipline that best allows one to determine that in which such flesh consists, and why it differs from the present.

Insofar as the book is an exercise in pragmatic historiography, it reproduces the same difficulties as Ochs's previous writings, albeit with a novel emphasis on the *overlapping* nature of pragmatic and plain-sense historiography. This is that Ochs does not make clear how the plain-sense historiography of the sort he uses to assert his broad civilizational schematic—which in itself has no exclusive relevance to post-liberal Christians or Jews—relates to his insistence upon the tradition-mediated nature of pragmatic historiography. For example, in discussing George Lindbeck, Ochs holds that Lindbeck “conducts his work both within the academic discipline of historiography *and* as contributing to timely, reformational work within the church,” implying that plain-sense and pragmatic historiography are continuous.³²⁴ Ochs also describes a similar process with regard to Mennonite theologian John Howard Yoder:

[Yoder's] “depth historiography” begins with the text-historical study as the scholar's means of making claims about what I label the “plain-sense history” of Scripture and early Scriptural commentary. The “depth historiographer” then accepts an additional responsibility, to answer certain questions that are of urgent significance for the current life and identity of his or her religious community but for which the text-historical evidence provides no clear answer. In this case, the depth historiographer proposes a historical claim that is most consistent with the plain-sense evidence and most responsive to the community's urgent questions.³²⁵

This passage is helpful, as Ochs provides a rule by which to distinguish Yoder's “depth-historiography” from plain-sense historiography without assuming their

³²⁴ Ochs, *Another Reformation*, p. 47.

³²⁵ *Ibid.* p. 143-4.

total separation. Ochs is likening depth-historiography not with an absence of responsibility, which he attributes to relativistic skepticism, but with *additional* responsibility, to a specific community. Yet even though Ochs describes depth-historical claims as “probabilistic rather than certain, vague rather than clear and distinct,” the above distinctions nonetheless do not alleviate the confusion with regard to different forms of justification among the two types of historiography, nor the more pressing issue of how Christianity and Judaism are in relation.³²⁶

Ochs’s reflections on pragmatic historiography are clearly in keeping with his understandings of Peirce’s triadic logic and the importance of genuine doubt as the instigator of inquiry, as well as post-liberal understandings of the integrity of faith traditions in history. Yet as to the question of how such an understanding of history can allow for mediation between different faith traditions, Ochs’s pragmatic historiography offers little help. By equivocating as to the relation between plain-sense and pragmatic historiography, one is left without the means to understand the meaning of historical events from one tradition to another, perhaps even the transmission of meaning from past to the present that is historiography’s methodological premise. This is very likely not Ochs’s intention, as Scriptural reasoning is nothing if not an effort to generate understandings across traditions and time periods. At times, Ochs himself recognizes the utility of Peirce’s pragmatism in allowing one to hinge back and forth between different types of historical research, paralleled by contrasting types of inquiry more generally. In the

³²⁶ Ochs, *Another Reformation*, p 145.

following passage, he connects this hinging function to his continuity between diagrammatic and corrective reasoning:

The task of...pragmatism [is to establish] a complementary relationship between mathematical or diagrammatic inquiries and corrective or logical inquiries. Reread as complements, the opposing pairs would serve as icons of this relationship: conceptual-and-historical inquiry, communal-and-generic-study, sciences of fact-and-belief, logical-and-mathematical inquiry, and perhaps (for later discussion) biblical-and-mathematical inquiry.³²⁷

The phrasing here speaks to the possibility of the type of inter-faith dialogue that Scriptural Reasoning puts into practice. Yet the risk in Ochs's writings seems to be that the same doubts that warrant historicity also render dubious the epistemology on which such historicity is based. Ochs has a stronger answer than the postmodern critics of historiography examined in the preceding chapter, since instead of saying that there is *no* connection between historicity and the past, Ochs might say that this connection does exist, and is to be known at its deepest level in the Torah. Yet Ochs recognizes that the Torah takes meaning not for all humans everywhere, but for his own tradition, and ventures to assert that the historicity/past relation *only* exists relative to whatever this or that community's equivalent to the Torah happens to be, and that this is necessarily some form of text. The implication here, contrary to Ochs's claims elsewhere on respecting the plain-sense of historiography, is that objective historical knowledge is impossible unless it refers to a functional equivalent of Scripture, which radically subverts the aim of Scriptural Reasoning to apply plain-sense historiography to identify certain traditions as the repositories of indubitable beliefs.

³²⁷ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 253.

This ambiguity in Ochs' work with regard to the status of history has been noted elsewhere, most notably in David Lamberth's and Leora Batnitzky's discussions of *Peirce, Pragmatism, and the Logic of Scripture* in *Modern Theology* from July 2008. In his article, Lamberth identifies a tension in Ochs' work between a radical pluralism with regard to faith communities and Peirce's understanding of evolution as an all-encompassing process, wondering whether "the fact of our being in a fundamentally evolving system is sufficiently fore-grounded in Ochs's account...The omission of the concrete instantiation of this evolution becomes even more acute when conjoined with Ochs's desire to be radically pluralistic."³²⁸ Batnitzky expresses a similar concern, with less emphasis on evolution and more on history and historicity. As she puts it:

For all its stimulating exploration of the formal, and hence universal, dimensions of particularity, Ochs' initial work on pragmatism and biblical hermeneutics leaves unanswered how to account for real difference between particular groups...A certain type of historicism remains a critical target of Ochs' pragmatic philosophy and biblical hermeneutics, but doesn't this tension in his thought produce but the flip side of this picture? We seem to find here a shift from History to historicity, for it is only our historicity that can justify the movement away from scripture's internal logic, that is, from the children of Abraham to the children of Adam. A historicist might thus claim that Ochs has not overcome the modern obsession with historical consciousness but has rather furthered historicism's own dialectic.³²⁹

Batnitzky's point regarding the dialectic between history and historicity left unacknowledged in Ochs's work is a helpful way of understanding the concerns that have motivated the present attempt to examine history in relation to Scriptural

³²⁸ Lamberth David C. "Assessing Peter Ochs Through *Peirce, Pragmatism, and the Logic of Scripture*." *Modern Theology*. 24, 3, 2008, p. 464.

³²⁹ Batnitzky, Leora. "Pragmaticism and Biblical Hermeneutics: Some Comments on the Work of Peter Ochs." *Modern Theology*. 24, 3, 2008, p. 482-4.

Reasoning. The source of the confusion appears to be an implicit historicism in the way Scriptural Reasoning is presented. Ironically, to the extent that historicism implies that history is the horizon beyond which nothing more can be said, the practical effect is to actually *disconnect* historically-situated traditions from one another. By understanding the relationship between pragmatic and plain-sense historiography as that in which one begins where the other leaves off, Ochs implicitly severs an analytical link between a given faith tradition within history and history itself, thus removing from distinct traditions (whose distinctiveness Scriptural Reasoning does not try to elide, and respects as part of its hermeneutic practices) the vague, yet real continuum of “history” from which each has emerged, and with respect to which each is continuous.

To extricate the many vital aspects of Ochs’s sense of history in Scriptural Reasoning from the implicit historicism that generates some of the ambiguity in Ochs’s statements about historiography, one may read Ochs in the same way Ochs reads Peirce, observing in Ochs’s writings on history what he might himself call a “confused symptom of some as yet unarticulated problematic situation” and distinguishing from within his texts progressive (aiding inquiry) and regressive elements (impeding inquiry).³³⁰ For present purposes, Ochs displays at least two relevant progressive tendencies—his commentaries on A-reasonings and B-reasonings in Peirce, as well as his theological reading of Peirce’s Existential Graphs—that run counter to a regressive tendency to distinguish too sharply

³³⁰ Ochs, Peter. “Philosophic Warrants for Scriptural Reasoning,” p. 468.

between Scriptural pragmatism and theosemiotics in the service of a self-identified postmodernism.

Turning to the regressive side first, one finds many instances in Ochs's work in which he describes his thought as postmodern. He also understands Peirce to be a postmodern thinker, and in his contributing chapter to David Ray Griffin's *Founders of Constructive Postmodern Philosophy*, gives two reasons why Peirce ought to be labeled the logician of postmodernism:

(1) Peirce attempted to accomplish the impossible: he launched his career with a critique of Cartesianism, a term standing for the modernist attempt to found philosophy on some formal principles of reasoning, *and then* attempted to replace Cartesianism with a set of anti-modernist principles that proved themselves as modernist as their contraries.

(2) His failure to accomplish the impossible engendered in him something he was unable to achieve willfully: *a habit of self-critical yet self-affirming thinking that was neither modernist nor antimodernist but, rather, a disciplined variety of postmodern thinking.*³³¹

Postmodernism is a term that has been understood according to many different definitions, and the version of "postmodern" given here should not be confused with the version encountered in the previous chapter in such figures as Keith Jenkins or Elizabeth Deeds Ermarth.³³² For his part, Ochs claims that he is "not overly

³³¹ Ochs, *Founders of Constructive Postmodern Philosophy*, p. 43.

³³² It helps to identify the definition of postmodernism upon which Ochs is operating. In the compilation's introduction, Griffin defines what he calls *constructive* postmodernism (as opposed to eliminative/deconstructive postmodernism) according to the following function: "It seeks to overcome the modern worldview not by eliminating the possibility of worldviews as such, but by constructing a postmodern worldview through a revision of modern premises and traditional concepts. This constructive or revisionary postmodernism involves a new unity of scientific, ethical, aesthetic, and religious intuition. It rejects not science as such but only that scientism in which the data of the modern natural sciences are alone allowed to contribute to the construction of our worldview" ("Introduction: Constructive Postmodern Philosophy." *Founders of Constructive Postmodern Philosophy: Peirce, James, Bergson, Whitehead, and Hartshorne*. Ed. David Ray Griffin. Albany: SUNY Press, 1993, p. viii). As defined here, postmodern strongly resembles Neville's axiology, and "anti-modern" thought what Neville considers postmodern.

concerned about the name,” but that it is just what he has decided to use as a self-description.³³³ It should be emphasized that it is not the term “postmodern” that is regressive, but the extent to which this term compels Ochs’s emphases on tradition as mediator of knowledge and the centrality of texts to traditions in such terms that traditions and texts are implied to be *impassible*. That either should be seen as impassible is not stated outright in Ochs’s texts, but it is possible to infer this claim with attention to a distinction that *is* stated explicitly in the texts:

theosemiotics/Scriptural pragmatism as theological applications of Peirce’s work.³³⁴

This distinction is not problematic in itself, yet it becomes an errant binary to the extent that Ochs implies that the contraries in the distinction are mutually exclusive.

In cases in which Ochs’s writings imply such mutual exclusion, the postmodern elements in Ochs’s work may be understood to impair the historical analysis so central to Scriptural Reasoning both as a corrective activity and as an interfaith dialogue model, prioritizing historicity while implicitly dismissing history.

It helps to be clear on how theosemiotics and Scriptural pragmatism are defined, as well as where they appear in Ochs’s texts. In the final chapter of *Peirce, Pragmatism, and the Logic of Scripture*, after having analyzed the development of Peirce’s career according to competing tendencies of conceptualism and pragmatism, Ochs moves toward a pragmatic reading of Peirce’s final, post-1905 pragmaticist phase (which he argues displays an irremediable vagueness to be

³³³ Kepnes, Ochs, Gibbs, *Reasoning After Revelation*, p. 1.

³³⁴ The term *theosemiotic* was coined by Michael Raposa, who has argued that Peirce’s metaphysics of continuity is closely bound up with his “Neglected Argument for the reality of God,” and that the relation of semiotic activity in its fully aesthetic, ethical, and logical dimensions refers to God’s reality, and hence is a *theosemiotic*.

complemented by some interpreter) by way of a succession of explicitly acknowledged readerships: pragmatic readers, common-sense pragmatists, pragmatic logicians, theosemioticians, and Scriptural pragmatists.³³⁵

Theosemioticians and Scriptural pragmatists are defined respectively as those for whom cognitive processes extend from some set of indubitable beliefs and those for whom these beliefs must take root in particular sets of texts. Theosemiotics is characterized by the broadness of the parameters with respect to which indubitable beliefs may arise, and as Ochs puts it, sets about diagramming such beliefs as rules of inquiry.³³⁶ In a sense, theosemiotics is a form of natural theology, gleaning insights in its analyses from philosophical and scientific reflections and (iconic and indexical) non-linguistic inferences. Theosemiotics is not limited to any linguistic or religious tradition, though it may refer to these; its limits are, according to Ochs, set only by the created order.³³⁷

Scriptural pragmatism, by contrast, is identified with history-and-story-shaped practices, and thus understands theological knowledge as mediated by way of the texts of specific traditions. Ochs defines Scripture as the prototypical narrative of how certain inquirers have been stimulated by their observations of human suffering to undertake corrective-and-diagrammatic inquiries that terminate in dialogues with God. For these inquirers, God is known through Scripture as the one who created the universe, who would repair, or redeem, the suffering in it, and

³³⁵ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 246-247.

³³⁶ *Ibid.* p. 282.

³³⁷ *Ibid.* p. 287.

who usually ended these dialogues (with Biblical prophets) by ordering the inquirers to tell their communities to care for their sufferers. To provide this care, the communities were often required to change their everyday practices, to change the methods they used to evaluate these repairs, and to change the ways they learned about these methods.³³⁸

Ochs's preferred approach is clearly Scriptural pragmatism, and he argues that theosemiotics has at least four weaknesses that Scriptural Reasoning does not. The first is that theosemiotics is too liberating, and is forced to attribute vagueness to the created order rather than texts, which has the effect of rendering Scripture as of secondary importance within that order.³³⁹ The second is that, in regard to Peirce's Neglected Argument (which will be examined in the following chapter), theosemioticians have no answer to the question of how God may enter into abductions other than the Neglected Argument itself. Third, the theosemiotic notion

³³⁸ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 287. Considering the importance of texts as a distinguishing point between theosemiotics and scriptural pragmatism (not to mention the tremendous importance attached to texts in light of the "linguistic turn" in twentieth-century philosophy more broadly), it is necessary to point out the role played by texts within the operations of the nested continua model. As an interpretive framework is made explicit through its being drawn, a circle drawn upon the graph is in some sense a "text," at least in the sense that it presents itself before consciousness in the form of linguistic units. At least in the sense in which texts render intelligible the objects to which they refer, the understanding of texts as circles on the graph is appropriate. Many texts—certainly this is the case with Scripture, which contains literary forms of many kinds along with complex networks of overlapping narratives—if considered *on the whole*, present a multiplicity of referents in relation to many different interpretive frameworks, which may, as needed, be diffused across any number of different circles. Yet in itself, "text" as an object of interpretation represents just one interpretive framework among many, and linguistic determinism as a philosophical perspective is no more tenable than determinism of any other kind. Moreover, recalling that the "underside" of a given continuum is its reflected Firstness, as one perceives a given entity-as-continuum, the immediate percepts themselves are qualities, which are not by any means exclusively linguistic; as the example of feelings elicited by a piece of music shows, most feelings are not themselves linguistic at all. In remaining open to as many types of signification as possible, including the non-linguistic iconicity that the nested continua model purports to demonstrate, theosemiotics could be argued as preferable to Scriptural pragmatism in this regard.

³³⁹ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 285.

of the meaning of the sign “God” as part of an inter-communal collection of pragmatically equivalent names is “plausible, but labored.”³⁴⁰ Fourth, Ochs takes issue with the unexamined cultural biases implicit in Peirce’s uses of the terms “God,” “Jesus,” and “John,” and sees in the linking of these terms to a certain tradition (in Peirce’s case, nineteenth-century Unitarian-become-Episcopalian) the threshold between Scriptural pragmatism and theosemiotics. The result is an insistence upon rooting theological and historical assertions in specific, historically situated traditions.

It is possible to see in Ochs’s critiques of theosemiotics an unnecessarily rigid binary between two forms of theological reflection. The nested continua model as expressed in this thesis is, among other things, an effort to place Ochs’s pragmatic historiography—and the self-understandings of Scriptural Reasoning more generally—along a continuum between a critical historicity and a constructive view of history as a temporally mediated field of human events within which traditions emerge. To the extent that theosemiotics and Scriptural pragmatism are understood as discontinuous, Ochs’s work runs the risk of veering too sharply toward historicity, toward radical pluralism. To be sure, Ochs does not insist that theosemiotics and Scriptural pragmatism are always in opposition, and the fact that he understands Scriptural pragmatists as a sub-community *within* theosemiotics (albeit one with unique advantages) speaks to a nested continua rendering of these two groups as concentric circles. The extent to which the theosemiotics/Scriptural

³⁴⁰ Ibid. p. 287.

pragmatism distinction might aide inquiry rather than stifle it reflects progressive tendencies in Ochs's writings, of which at least two might be mentioned.

The first progressive tendency is displayed in Ochs's application of Peirce's distinction between what he called A-reasonings and B-reasonings. B-reasonings refer to our everyday reasoning about the world. They represent what we think and how we act on these thoughts. Yet in cases when the B-reasonings fail in their purpose, A-reasonings become necessary. Peirce put the matter as follows:

Your reasonings are determined by certain general habits of reasoning, each of which has been, in some sense, approved by you. But you may recognize that your habits of reasoning are of two distinct kinds, producing two kinds of reasoning, which we may call A-reasonings and B-reasonings. You may think that of the A-reasonings very few are seriously in error, but that none of them much advance your knowledge of the truth. Of your B-reasonings, you may think that so many of them as are good are extremely valuable in teaching a great deal. Yet of these B-reasonings you may think that a large majority are worthless, their error being known by their being subsequently found to come in conflict with A-reasonings. It will be perceived from this description that the B-reasonings are a little more than guesses.³⁴¹

The distinction between everyday resources (B-reasonings) and deeper resources (A-reasonings) is central to Ochs work, explaining why, in his analysis of Peirce's philosophy, his deeper readings of Peirce's texts are addressed to different readerships, since these readerships will come with their own, distinct sets of A-reasonings that shape their interpretive tendencies. As a sign that this tendency in Ochs's work may also (perhaps predominantly) derive from his background in rabbinic philosophy, Ochs also notes that this two-tiered understanding of

³⁴¹ CP 2.189. Peirce referred to A and B reasonings in terms of one's *logica utens* (logic in possession), which is contrasted with *logica docens* (logic as an object of study), both of which reflect Peirce's affinity for scholastic terms of expression.

reasoning also applies to analysis of the Torah. Describing tendencies of interpretation from medieval rabbinic philosophy, he notes the following terms:

Peshat—the “plain-sense” of a text as defined within the rhetorical context of some body of received literature.
Derash—the “interpretive sense” of a text as lived meaning; it is performative, hermeneutical.³⁴²

It is not difficult to see in Ochs’ distinction between plain-sense historiography and pragmatic historiography a replay of his understandings of *peshat* and *derash*, and the sense in which one’s explicit inquiries presuppose implicit guiding principles as central to the methodology of Scriptural Reasoning more generally.

According to Ochs, a critical error of modernist philosophy is to have “reduced itself to a theoretical science, whose leading principles remain theoretical postulates,” which is to say that it has attended solely to B-reasonings at the expense of the A-reasonings as culturally-conditioned habits upon which B-reasonings depend.³⁴³ To the extent that it has been foundationalist, modernist philosophy has also erred by seeking the *ultimate* A-reasonings as foundations for all thought and culture, which in turning implied A-reasonings into explicit B-reasonings through the act of writing them down and pronouncing upon them, has mistaken the one category for the other. This is a trenchant critique, made even sharper by its inclusion of the process by which A-reasonings may be turned into B-reasonings:

Logicians have previously contented themselves with diagrams of B-reasonings, either excluding A-reasonings or else reducing them to B-reasonings. The pragmatist’s claim is that the A-reasonings must and can also be diagrammed, but that the diagrams will be of a radically different sort than previously constructed. They will be diagrams that allow for precise

³⁴² Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 6.

³⁴³ *Ibid.* 365.

formulation of the logics of abduction, of vagueness, of relations, and of material continuity.³⁴⁴

The nested continua model shares this aim of including “logics of abduction, of vagueness, of relations, and of material continuity,” and understands A-reasonings as whatever is *not* itself upon the graph but which guides the assumptions by which its markings (B-reasonings) are drawn, with certain A-reasonings translatable into B-reasonings through the drawing of some additional circle either within or around its previously-drawn counterpart. In explicating the distinction between A and B reasonings, Ochs allows for a more precise sense of how different types of historiography may be recognized as distinct without being understood as inherently opposed.

Ochs’s understanding of logical diagrams bears on his discussion of Peirce’s Existential Graphs, which is the second relevant progressive tendency to be discussed. Holding that “existential diagrams work, because perceptions are themselves like diagrams,” Ochs praises the way that the Existential Graphs allow for a radical pluralism, in which different markings are conjoined only through being part of a vague spatial background.³⁴⁵ Furthermore, with regard to several points Ochs makes about the Existential Graphs, there is much that directly bears on the self-understanding of nested continua as a model of theological interpretation. For example, Ochs writes:

[In the Existential Graphs] Peirce displays the *inventive* and reparative purpose of his mathematics: to provide philosophers with a means of experimenting with certain conceptions and, thereby, of proposing methods

³⁴⁴ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 196.

³⁴⁵ *Ibid.* p. 211.

of habit-change....[Such] reasoning therefore does more than contribute elemental terms to Peirce's pragmatic philosophy; *it enacts within the confines of the imagination all that Peirce takes pragmatic reasoning to enact within the realm of everyday experience.*³⁴⁶

This passage speaks to the sense in which the markings/circles on the nested continua graph are at once both abductive and open to anything that enters into one's imagination, yet also to be understood as referring continuously to real experiential objects outside of one's imagination. Ochs likewise recognizes the logical versatility of the Graphs across different interpretive contexts:

The proof [of pragmatism] will lie in the activity that, serving a given principle, leads the mathematician-scribe to move from one particular enscription to another...[This] is therefore not to advertise any particular system he constructed, but to offer the reader some particular way of experiencing the general activity of enscription that is made possible by such a system.³⁴⁷

This passage speaks to nested continua's hope that its logical rules of operation, which is to say the rules by which markings and circles may be added or redrawn (as Ochs put it, "move from one particular enscription to another"), might obtain regardless of one's normative context.

Ochs also links the Existential Graphs to Peirce's argument for God's reality in a way that bears on how nested continua might show pragmatic and plain-sense historiography to be related. For Ochs, the prototypical "existential graph" is Scripture; from *Another Reformation*:

Scripture is the prototype as well as the primary book of instruction in the practice of repair, which Peirce calls "existential graphs"...meant to perform, as well as represent, their subject matter. This means that the formal scribbings of a logic of relations remain existentially linked to the context of

³⁴⁶ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 197.

³⁴⁷ *Ibid.* p. 204.

their composition: like Scripture, a formal logic of relations is not sent off into this world to be read in any way by anyone; instead, it calls its readers into finite sets of relations that bind author, context, and reader together in context-specific ways...In sum, the logic of repair is already a theo-logic, since we know of no adequate way of analyzing the process of repair without being guided by the reparative logic of Scripture.³⁴⁸

This is a remarkable passage, congenial insofar as much of how the nested continua model hopes to emulate the logic of Peirce's Existential Graphs as a kind of interpretive *engagement* that opens onto theology. By arguing that theosemiotics and Scriptural pragmatism need not be mutually exclusive modes of theological interpretation, the hope is that the type of logic Ochs is describing can likewise be applied to *iconic* signification in diagrammatic form as well as *textual* signification in Scripture. On the nested continua graph, a given "faith tradition" (whose indubitable beliefs may be investigated through Ochs's pragmatic historiography) may be drawn as a circle within a circle understood as "history" (which may be investigated through plain-sense historiography). Moreover, the relation among Ochs's imagined readerships in *Peirce, Pragmatism, and the Logic of Scripture* is precisely the nature of a smaller circle to a larger one on the nested continua graph. Ochs's narrower readerships share assumptions of their more encompassing readerships that include them. Yet at the same time, the narrower communities hold indubitable beliefs that their broader counterparts do not share, beliefs that reflect a greater intensity of feeling and that answer to distinct norms.

These efforts of clarifying the status of history in Ochs's writings reflect the hope of the nested continua model for retaining the practices of Scriptural

³⁴⁸ Ochs, *Another Reformation*, p. 15-16.

Reasoning as a meaningful activity within a larger context. The upshot is that history serves as the framework by which a tradition may be diagrammed with respect to its past, and historicity serves as the critical tool by which this past is interrogated with respect to problems in the present. Ochs illustrates this relationship beautifully by asking the following question: “What does the God who creates the universes of experience have to do with repairing those universes?”³⁴⁹ The answer suggested by the nested continua model is that a God who gives temporality to history provides history with the capacity for repair, for one may identify within history certain communities with certain problems, as well as to determine whether our own conceptual distinctions or those of another community are errant, and thus enact the sorts of reparative reasonings that are played out in the self-understandings of Ochs and his colleagues in Scriptural Reasoning. By showing how the meaning of scripture is completed through its being enacted in a given reader’s specific changes of habit that ensue from its being interpreted, Ochs provides a sense of how Peirce’s logic may engage the lives of specific individuals in profound, even transformative ways, yet inform the practices of historical inquiry at the same time.

Neville’s axiology of thinking

The heart of Neville’s axiology is the claim that all thinking is valuing, a claim that follows from his argument for creation *ex nihilo*. Creation *ex nihilo* holds that the universe has been created out of nothing, which was the central argument of

³⁴⁹ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 245.

Neville's first book, 1968's *God the Creator*.³⁵⁰ In that book, Neville summed up his argument as follows:

The theory of creation accounts for what determinations need from their ontological unity; and creating *ex nihilo* is precisely what something transcending the determinations and indeterminate in itself can do. If it were to create out of its own potentialities instead of *ex nihilo*, then being-itself would have to be determinate, which it cannot be. What is created is determinate being, and determinate being contrasts with absolute non-being. But what creates determinate being must in itself be independent of what it creates, since what it creates depends on it wholly.³⁵¹

Among its many implications, creation *ex nihilo* for Neville means that creation is intelligible, that being and God are identical, and that nonbeing is not simply the negation of something positive, but the absolute contrast term that makes creation *ex nihilo* possible.³⁵² Yet God, in addition to being identical with being, also fulfills a double function of being both indeterminate creator of all that is determinate and determinate part of the created order. As will be explored below, Neville's notion of creation also bears on his metaphysics of time, in that God is the eternal counterpoint that gives the three modes of time their meaning and reconciles them, and yet is also immanent within them. Moreover, as both indeterminate ground of determinateness and embodiment of immanent determinateness, God serves as a

³⁵⁰ Carl G. Vaught has recognized Neville's argument for creation *ex nihilo* as the most brilliant insight of his career, and as the basis for much of the rest of his philosophy ("Being, Nonbeing, and Creation *Ex Nihilo*." *Interpreting Neville*. Ed. Chapman, J. Harley and Nancy K. Frankenberry. Albany, NY: SUNY Press, 1999, p. 148).

³⁵¹ Neville, Robert C. *God the Creator: On the Transcendence and Presence of God*. London: University of Chicago Press, 1968, p. 12.

³⁵² Vaught, *Interpreting Neville*, p. 147.

legitimate object of semiotic analysis, albeit referential only for “broken symbols” that signify a finite/infinite boundary.³⁵³

The entailments of Neville’s argument for creation *ex nihilo* include a strongly apophatic component with regard to understanding divine reality. For insofar as God is the indeterminate ground of determinateness, nothing can definitively said of the divine beyond the simple fact that it creates. Neville acknowledges this apophatic implication clearly in the following passage, from *Recovery of the Measure*:

Apart from creating things, there is no character to the ontological ground or divinity, since all “character” requires essential and conditional features, all of which must be created. The identification of the ontological ground comes from noting that there are indeed finite, temporal things that must be grounded. I call that ground “divine” because creation makes the affinity for each other of essential features that have no worldly contact save through conditional features. This is profound love or compassion, deeper than the conditional connections of things that can be brutal beyond belief.³⁵⁴

In his article, “Knowing the Mystery of God: Neville and Apophatic Theology,” Delwin Brown likewise notes the apophatic element of Neville’s understanding of creation, convincingly arguing on behalf of how Neville’s sense of creation offers a response to tendencies in our culture toward religious infallibility. On Brown’s view, an apophatic theology is a way of affirming deity that “by its very nature thwarts any attempt to use deity to deny the fallibility of our interpretations, to elevate some interpretations above others as a matter of privilege, and to employ those so privileged as weapons of destructions.”³⁵⁵ This addresses what Brown calls

³⁵³ Neville, Robert C. *The Truth of Broken Symbols*. Albany, NY: SUNY Press, 1996, p. x-xii.

³⁵⁴ Neville, *Recovery of the Measure*, p. 183.

³⁵⁵ Brown, Delwin. “Knowing the Mystery of God: Neville and Apophatic Theology.” *Interpreting Neville*. Ed. Chapman, J. Harley and Nancy K. Frankenberry. Albany, NY: SUNY Press, 1999, p. 200.

one of our culture's most pernicious problems, which is the absolutizing of belief.³⁵⁶ I agree with Brown, and will argue that the distinction between a continuum that is "translucent" regarding interpretation (allowing for further inquiry, tolerant of pluralism) versus one that is "opaque" (misconstruing itself as ultimate for inquiry, as well as the interpretive framework to which everything must conform) is guided in part by its recognition that very little can be positively said about either absolute Thirdness or absolute Firstness, which are the prevailing terms by which the nested continua model interprets the experience of the divine. To the extent that anything enters the imagination to be drawn upon the graph (or anything in reality to which the imagination refers—these are continuous), it is characterized by Secondness, which by its very modality of being (which is to say as existent, defined by its relations, and discontinuous by way of brute reaction) cannot be ultimate.

One significant way that Neville's argument for creation *ex nihilo* informs his axiology is through the distinction between essential and conditional features of determinate entities. To be a determinate something, Neville holds, is to exist as a harmony of essential and conditional features, which is to say a harmony between those features that characterize a determinate thing as itself and those that relate it to other determinate things.³⁵⁷ As Neville himself puts it:

To be something rather than nothing, and to have a determinate identity in relation to and over against other determinate things, I propose we conceive a thing to be a harmony of essential and conditional features...Conditional

³⁵⁶ Brown, "Knowing the Mystery of God: Neville and Apophatic Theology," p. 190.

³⁵⁷ The nested continua model likewise adopts the essential/conditional features distinction, understanding the normative ideal and qualitative uniqueness of an existent continuum as its essential features, which remain unchanged wherever the continuum is located on the graph, and whatever relates to its Secondness (relative vagueness/generalality, placement in relation to other circles/markings, etc) as its conditional features.

features are those a thing has by virtue of which it relates to other things. They constitute its situational, logical, and causal relativity. Essential features are those a thing has unique to itself by virtue of which it orders the conditional features in a definite way defining its identity.³⁵⁸

Unlike Ochs's sense of identity as restricted to historically situated communities and traditions, Neville understands identity to include an additional metaphysical component by way of essential features (without also denying history and culture as conditional features). Everything that is determinate is related by means of its conditional features to at least one other thing, yet also possesses by means of its essential features its own unique reality, its own *haecceity*.³⁵⁹ The upshot bears on axiology in that to truly understand something requires an accurate sense of its value, which is why Neville's definition of truth is as a carryover of value from object to interpreter. As George Allan has observed, Neville posits a continuum of values from most trivial to most important, which means that for any given situation there is always some maximal value—a "normative measure"—that can be potentially realized.³⁶⁰

Neville's axiology entails a shift away from some of philosophy's most ingrained axioms. Its most obvious target is the fact-value distinction, which stems

³⁵⁸ Neville, Robert C. "Sketch of a System." *New Essays in Metaphysics*. Ed. Robert C. Neville. Albany, NY: SUNY Press, 1987, p. 256.

³⁵⁹ Neville describes *haecceity* in terms that, incidentally, resemble the discussion of Peirce's "concrete reasonableness" thesis, as well as nested continua as historical trajectories, discussed in Chapter Two. As he puts it: "Any temporally discursive process involves levels of vague structure that are decisively specified down to *haecceity* as actualization takes place. As a particular level of vagueness becomes actualized, an actual history accrues around it so that it becomes a stable structure, as for instance when family patterns settle down. Within that structure, as its specifications, other decisions may become structured, so that the structure is a complex hierarchy. On the other hand, it might be that whereas the higher levels of vague structure become stabilized by actuality, the lower levels down to *haecceity* are not so stable, and are the result of more or less idiosyncratic decisions" (*Recovery of the Measure*, p. 254).

³⁶⁰ Allan, George. "Thinking Axiologically." *Interpreting Neville*. Ed. Chapman, J. Harley and Nancy K. Frankenberry. Albany, NY: SUNY Press, 1999, p. 20.

in its epistemology from Descartes and was reinforced by Kant's efforts to establish the transcendental conditions of certain knowledge. Neville further distinguishes his view of truth as carryover of value from the Aristotelian claim of truth as carryover of form, which allows him to retain his commitment to objective realism while recognizing the value-ladenness of perception.³⁶¹ The inescapability of value in perception also speaks to Neville's admission of an aesthetic basis to the preferences necessary to human judgment, which follows Peirce's own classification of the normative sciences, in which aesthetics is understood as the basis for ethics, and ethics as the basis for logic.³⁶² For Neville, the aesthetic goodness of an idea contains its consequences, which is to say that it is logically monadic as that which is good in itself. Yet though the search for value constitutes the basis for investigation upon the *essential* features of a determinate entity, determining its *conditional* features requires thoroughly looking into any and all networks in which that determinate object participates.³⁶³ Investigating such networks is an effort that demands patience and discipline, but also the ability to accommodate a plurality of meaning-systems and alternative perspectives without reducing them. Neville thus

³⁶¹ For Neville, value pervades perception at its most intricate levels, and in *Normative Cultures* he identifies six points at which values enter into theoretical reasoning: (1) initial identification of something as problematic; (2) selection of what is important in the abductive guess of an initial hypothesis; (3) abductive move from vague guess to well-formed premises from which argumentative deductions can be made; (4) deductive move from formal premise to inferred conclusion; (5) limit reached in classifying phenomena, a limit determined by the contrasting example of alternate theories with attendant alternate values; (6) formal probation of the theory according to what the classified evidence shows, which reflects values inherent in the language of probability (*Normative Cultures*, p. 41). Nested continua does not establish the intersection of value and perception so meticulously, though in arguing for a definition of truth as carryover of value *with respect to absolute Firstness (value) and absolute Thirdness (form)*, one could argue that it understands the carryover to proceed *through* form, by intersecting it.

³⁶² CP 5.36.

³⁶³ CP 5.130.

places great emphasis on philosophical system-building, in which as many approaches as possible might be entertained and evaluated, a quality that resembles much of Peirce's own thinking. Neville's love of system stands opposed to most modernist (and anti-modernist) philosophy, which has tended to dismiss systematic thinking in favor of questions of method and epistemology. As a model of theological interpretation, nested continua hopes to emulate Neville's sense of non-reductive systems.

Without denying the originality of Neville's axiology, it possible to identify from among its influences certain aspects of Peirce's philosophy. For Peirce, any person is characterized by certain habits of interpretation, and though one might interpret a given environment well or badly, one cannot, therefore, *not* interpret. By guiding investigation into which aspects of one's environment can be ignored and which cannot, a good interpretation allows one to determine what is important, with importance defined relative to some purpose. It is at the heart of Neville's axiology to recognize that in this process of decision-making, this sense of purpose—and the selection of interpretive contexts more broadly—may be understood fundamentally as valuing.³⁶⁴ Although Neville finds fault with Peircean interpretation for lacking sufficient imagination regarding the metaphysics of temporality, he nonetheless admires its conception of intellectual activity in terms of *purpose* rather than *content*—in Peirce's view, content is simply the set of experiences integrated into the interpretive activity that make it possible (which is

³⁶⁴ Frisina, *Theology in Global Context: Essays in Honor of Robert C. Neville*, p. 163

not to say that metaphysics should be reduced to hermeneutics).³⁶⁵ The prevalence of purpose in cognition bears on Neville's sense of semiotic engagement, with "engagement" as his preferred term for semiotic activity understood axiologically.³⁶⁶ Neville also follows Peirce in recognizing the three principle ways by which signs signify their objects: as icons that mimic the objects, as indices that are causally connected with objects, and as symbols that signify by convention.³⁶⁷

Neville's understanding of time and eternity

In these discussions of Neville's axiology, Peirce's influence is observable in Neville's understanding of interpretation, of the logic of vagueness, of the hypothetical nature of inquiry (including metaphysics), and of the benefits of framing one's ideas as a non-reductive system. Yet in terms of Neville's understanding of time in relation to eternity, which has been central enough to his axiology as to merit its own book (*Eternity and Time's Flow*, 1993), and which appears at length among his other writings, he diverges from Peirce's philosophy decisively. For example, in the following passage, Neville argues that Peirce's pragmatism lacks a clear account of the reality of the past and present:

A crucial component of the theory of interpretation is a theory of the modalities of time. Lacking a sophisticated theory of time, pragmatism [including that of Peirce] found itself easily accounting for the interpretation of the future but in some pain with regard to the past and present. A theory

³⁶⁵ Neville, Robert C. *Recovery of the Measure*, p. 265.

³⁶⁶ Neville, Robert C. *Symbols of Jesus: A Christology of Symbolic Engagement*. Cambridge: Cambridge University Press, 2001, p. 5n. Neville has stated that the notion of engagement comes more directly from Dewey's sense of "transaction," yet the means by which he describes engagement derive primarily from Peirce. ("Thanks and Conversation: Responding to My Theological Colleagues." *Theology in Global Context: Essays in Honor of Robert C. Neville*, p. 358).

³⁶⁷ Neville, *The Truth of Broken Symbols*, p. 37.

of time is necessary to understand “carry-over” of value from object to interpreter.³⁶⁸

The means by which eternity provides a ground for the three modes of time in their essential as well as conditional features is at the core of Neville’s argument for eternity, an argument that is untenable unless past, present, and future are *all* understood as real and some sense of their relationship clarified. The implication of Neville’s critique is that, to the extent that pragmatism implies that past and present lack reality except insofar as they are potential objects of interpretation, pragmatism thus fails to provide a proper metaphysical basis for the time/eternity relation, and risks the reduction of metaphysics to hermeneutics.

There is nothing inherently problematic about Neville’s understanding of time deriving from some other source besides Peirce. As with his argument for creation *ex nihilo*, there are plenty of important elements in Neville’s thought that do not stem from Peirce—an inevitability, considering Neville’s career as a theologian with an irenic approach to many cultures and intellectual systems (and considering Peirce’s limitations). From the standpoint of the nested continua model, however, this presents a problem. For example, without mentioning Peirce (or time) explicitly, the following passage from Neville’s *A Theology Primer* likewise takes aim at the way in which the nested continua model, envisioned as it is as innumerable concentric circles, might understand eternity as that which lies beyond a circle designated as “time”:

A harmony thus is not some inclusive higher entity that integrates its primary features according to its own determinate character. If a harmony

³⁶⁸ Neville, *Recovery of the Measure*, p. 86.

would have to be that, then we would always be seeking some higher entity to give determinateness to lower entities, until we got to some tiptop entity that has nothing different from itself with respect to which it could be determinate.³⁶⁹

Neville's criticisms of nested continua's metaphysics concerning time appear to fall under two points: (1) Peirce lacks a clear account of present and (particularly) past reality except insofar as such reality serves as an object of interpretation, thus denying each temporal mode its own normativity and obviating the possibility of the harmony of the three modes in which eternity participates; (2) structurally, an infinite regress of higher continua deprives determinate entities of their own essential features. The reasons that this is a problem for nested continua are not only because the metaphysics upon which the model is based stems from Peirce's synechism, and so to deny Peirce's validity regarding the time/eternity relation is to foreclose precisely the aspect of Neville's thought that is the most important for nested continua, but also because this denial would jeopardize the relevance of many of Neville's theological insights to nested continua, including creation *ex nihilo* and understanding truth as carryover of value.

It helps to get a better understanding of the role that time plays in Neville's work. For Neville, time is the sum of the temporalities of all things, and each of the three modes of time is constituted by its own distinctive temporality.³⁷⁰ The temporality of the past, for example, "environs, calls up, and funds all present moments;" its distinguishing feature is its fixed objectivity. Present temporality is characterized by a decisiveness that "reduces the manifold of contexts funded by the

³⁶⁹ Neville. *A Theology Primer*, p. 31.

³⁷⁰ Neville. *Recovery of the Measure*, p. 179.

past according to the structure of possibilities,” rendering the potential actual; its distinguishing feature is decisiveness. Future temporality is characterized by patterns that “integrate the past as it is being changed in the present,” which is to say the future is a constantly shifting set of patterns for which the past provides and the present exercises potentialities; its distinguishing feature is its vaguely structured sense of possibility.³⁷¹ For each of these modes, temporality is contrasted with timeliness; temporality is what gives each mode its essential features relative to time *as a whole*, whereas timeliness is what gives each mode its conditional features relative to the *other modes of time*. Conditional and essential features unite in each mode of time as concrescent harmonies.³⁷²

For these distinctions to amount to a coherent sense of time, Neville argues that the three modes of temporality must be balanced against an understanding of eternity as that which stands beyond the three modes and yet also within them as their ontological ground of creativity and mutual relevance. Eternity thus may be thought of as God’s reality both within and beyond each moment in time. Although the logic of Neville’s notion of time warrants his dual assertions of God’s being imbedded in time and his transcendence beyond it, Neville is careful to point out our inability to draw definite conclusions from this:

³⁷¹ Neville. *Recovery of the Measure*, p. 176.

³⁷² The term “conrescence” comes from Whitehead, and was among his central ideas. In 1929’s *Process and Reality*, Whitehead gave the following explanation for conrescence: “‘Production of novel togetherness’ is the ultimate notion embodied in the term ‘conrescence.’ These ultimate notions of ‘production of novelty’ and of ‘concrete togetherness’ are inexplicable either in terms of higher universals or in terms of the components participating in the conrescence. The analysis of the components abstracts from the conrescence. The sole appeal is to intuition” (*Process and Reality: Corrected Edition*. New York: Macmillan, 1978, p. 21-22).

From our limited standpoint, where the future is still open and at which point the eternal actual resolution of our future connection does not exist, the future of God's address to us is "other." The character God will take in response to our needs and to our deserts remains alien to us in the present, however real it is in eternity. From the standpoint of the present, God's creation in the future is really other: this issue is not one of our ignorance. Even God does not *now* know what the future holds because God is never only *now*. For ourselves, who truly are temporal, existing now with a future still future, the future and God's special presence as redemptive or condemnatory, helpful or negligent, merciful or punitive, remains other.³⁷³

To put the matter in Robert Corrington's rather poetic terms, for Neville, "eternity is as close to us as our own breath," and "eternity and the flow of time are grace-filled even if things in time often suffer blindly and have no sense of their whence and whither."³⁷⁴ For Neville, it is imperative that one recognizes the integrity of each of time's three modes and not to conflate the essential temporality of any *particular* mode with time as a whole. The logical positivists of the late nineteenth and early twentieth centuries, for instance, often assumed that past temporality, with its fixed timelines, could be extended indefinitely into the future. In doing so, they denied the validity of any (future-oriented) vague normativity or (present-oriented) burdens of decisiveness within their philosophical purview.³⁷⁵ Neville likewise argues that pragmatists like Peirce have erred in a different way, mistaking the temporality of the *present* for time as a whole. On this view, pragmatism conflates time with that which consists in present decisiveness—a crucial oversight.

Although pragmatism's understanding of truth at the end of inquiry and the forward nature of reference do ameliorate the oversight somewhat by admitting a future-

³⁷³ Neville, *Eternity and Time's Flow*, p. 211-2.

³⁷⁴ Corrington, Robert. "Neville's 'Naturalism' and the Location of God," *Interpreting Neville*, p. 134.

³⁷⁵ Neville. *Recovery of the Measure*, p. 180.

oriented temporality, the inability to articulate the relationship of past and present renders its theory of time, on Neville's view, unfit to serve as a counterpoint for divine creation.

In her essay in *Interpreting Neville*, "Neville and Pragmatism, Toward Ongoing Dialogue," Sandra B. Rosenthal offers a very helpful illumination of the contrast between Peirce's and Neville's respective understandings of time. According to Rosenthal, Neville's critique of pragmatism's notion of time overlooks the fact that Neville relies on a model of time derived from Whitehead's process philosophy rather than Peircean pragmatism. Whitehead conceived of time in terms of the coming together of concrescent harmonies, and Neville, in asserting temporal meaning by way of a model of coming together of essential and conditional features in a harmony, relies on a similar understanding. As Rosenthal observes, Neville relies on a fundamental intuition of the "bringing-together-of" that which is mutually external in his writings on temporality, which contrasts with Peirce's model of emergent entities within continua.³⁷⁶ This is why harmony as Neville sees it does not involve some higher principle that integrates its components; rather, harmony is the "sheer togetherness" or fit of the essential and conditional.³⁷⁷ Moreover, unlike that of Neville, whose distinctions between past, present, and future lend themselves to viewing the present as a discrete moment, Peirce's sense of continuity justifies a *functional* discreteness within what is not itself discrete by arguing that infinitesimals are real potentialities as emergent continua. In other

³⁷⁶ Rosenthal, "Neville and Pragmatism: Toward Ongoing Dialogue," *Interpreting Neville*, p. 69.

³⁷⁷ *Ibid.* p. 67.

words, each new present brings about a new past oriented toward a new future, and though past and future emanate from a present, each temporal dimension is in a sense spread through every other.

In his preference for Whitehead's process metaphysics regarding time, Neville does not endorse Whitehead unreservedly; there are several important caveats. One such caveat is that, for Neville, the harmony of a determinate being relative to its cosmological location is divinely created, whereas for process thinkers, such harmony exists as self-created within the unfolding of the system.³⁷⁸ In other words, for process theologians, the ground of creativity is something other than God, and although Neville argues that Whitehead's insights "have stimulated the most vigorous, novel developments in philosophical theology since the era of genius in the thirteenth and fourteenth centuries," such a conception deprives the divine of its ability to serve as the creator of all determinate beings.³⁷⁹ Another caveat was put forth by Paul Weiss, to whom Neville owes his typology of conditional and essential features.³⁸⁰ In 1949's *Reality*, Weiss criticized Whitehead's cosmology on the grounds that it removes the possibility of persistent substantial individuals as incomplete entities subject to change and grow over time, a point with which Neville has agreed.³⁸¹ Caveats notwithstanding, Whitehead's cosmology has functioned as an integral part of Neville's work. As George Allan has pointed

³⁷⁸ Ford, Lewis S. "Creation and Concrescence." *Interpreting Neville*, p. 165.

³⁷⁹ Neville, Robert C. *Creativity and God: A Challenge to Process Philosophy*. New York: Seabury Press, 1980, p. 6.

³⁸⁰ Paul Weiss is also notable among Peirce scholarship as one of the original compilers, along with Charles Hartshorne, of the *Collected Papers of Charles Sanders Peirce*.

³⁸¹ Weiss, Paul. *Reality*. New York: Peter Smith, 1949, p. 208f.

out, Whitehead's sense of concrescence informs Neville's use of the term "harmony" as the means of understanding the mix of conditional and essential features characterizing determinate beings.³⁸² Concrescence also bears on the notion of causation as *prehension*, another term from Whitehead's writings, understood as the rooting of the self in the process of nature and decision as a mark of nature's reality as well as the subjective reality of a thing.³⁸³

Neville himself has agreed with Rosenthal's basic argument about his roots in Whitehead regarding time and eternity. In his article, "Responding to My Critics," which, like Rosenthal's own "Neville and Pragmatism," appears in *Interpreting Neville*, he characterizes their exchange in the following terms:

The fulcrum of the disagreement is whether the past has to be fully determinate in order for the present to make an advance upon it. [Rosenthal's] pragmatism says that a concrete moment of processive emergent change does not need to have the past be fully determinate, whereas my process theory does, treating past and present (and future) as distinct modes of temporal reality that therefore have to be harmonized for flow to take place.³⁸⁴

Another point at issue is whether emergence is the proper framework for understanding the nature of process. Neville here argues that Rosenthal's "emergence is temporally unextended, with no discrimination of earlier and later,"³⁸⁵ which is a distinct contrast from Rosenthal's claim that the "temporally thick" present is among Peirce's most radical ideas, "for it overturns notions of the

³⁸² Allan, *Interpreting Neville*, p. 8.

³⁸³ Neville, Robert C. *Reconstruction of Thinking*. Albany, NY: SUNY Press, 1981, p. 61.

³⁸⁴ Neville, "Responding to My Critics," *Interpreting Neville*, p. 297.

³⁸⁵ *Ibid.* p. 297.

indivisibility of the present considered inviolate since as early as St. Augustine.”³⁸⁶

Still another distinction in this discussion is the question of whether processes are enacted through an initial state of disunity or one of unity, which underlies Neville’s qualms about Rosenthal’s sense of emergence. As he puts it:

Rosenthal would say that the process of emergence is what creates separations so that we get temporal extensionality: I say that we have to have the separations brought into harmonious connection in order to get the extensional continuity.³⁸⁷

Neville’s characterization of Rosenthal’s position is accurate, and Rosenthal is likewise accurate in holding that her definition of emergence is fully compatible with change as understood by Peirce’s metaphysics (as well as the nested continua model). Yet is it true that Neville, whose theory of symbolic engagement, sense of metaphysics as hypothetical, ambitions to system-building, and logic of vagueness owe so much to Peirce, is as fundamentally incompatible with a Peircean understanding of time as both Neville and Rosenthal imagine? Rosenthal argues that “habit-taking, interpretation, and temporality are ultimately intertwined in pragmatic philosophy, and though Neville’s appropriations from pragmatic philosophy...are highly constructive within his position, his attack on pragmatism’s theory of temporality...aligns him with Whitehead in opposition to pragmatism in a very fundamental way.”³⁸⁸ If this were fully accurate, then not only the plausibility of nested continua’s appropriation of Neville’s philosophy would be called into question, but perhaps also Neville’s various appropriations from Peirce, as well.

³⁸⁶ Rosenthal. *Time, Continuity, and Indeterminacy*, p. 125-126.

³⁸⁷ Neville, “Responding to My Critics,” *Interpreting Neville*, p. 297.

³⁸⁸ Rosenthal, “Neville and Pragmatism: Toward Ongoing Dialogue.” *Interpreting Neville*, p. 66.

Thankfully this is not the case. It is not that Rosenthal is wrong to identify Whitehead's metaphysics in Neville's account of time so much as that it is possible to show that some of the most vital aspects of Neville's axiology can be retained through a metaphysical model derived from Peirce. To make this move requires drawing certain distinctions not found in Neville's writings (most notably between creator and eternity) and eliding some others that are found in his writings (time/timeliness). Granted, many of the distinctions given in Rosenthal and Neville's exchange are not only meaningful, but also irreconcilable in the terms in which they are presented: past as fixed/open, present as temporally extended/unextended, emergent discontinuities from base continua/"sheer togetherness" through concrescence of that which had been separate, etc. In the face of such binary distinctions, one might follow the method of Ochs's textual reasoning and trace the genealogies of these binaries back to their respective roots in Whitehead and Peirce, distinguishing progressive/regressive tendencies in Neville's work on the hypothesis that elements stemming from Whitehead are regressive and those from Peirce are progressive. Yet in this case there is a simpler way to proceed. As George Allan has put it, "the only way to refute Neville is to provide a better hypothesis, and in this the first step of a responsible critique is appreciation."³⁸⁹ Out of appreciation for many of the entailments of an axiology that are inseparable from the theological hopes of the nested continua model, the following paragraphs will explore how Neville's critiques of Peirce's account of time

³⁸⁹ Allan, "Thinking Axiologically," *Interpreting Neville*, p. 5.

might be answered, and why nested continua is compatible with an understanding of eternity along with time.

The first point of Neville's critique of the Peircean account of time is that it appears to lack a clear sense of the past. Neville argues that, since Peircean reference is always forward-looking, or future-oriented, the past *qua* past lacks meaning except insofar as it may serve as an object of interpretation. Without the past understood in terms of some essential feature, which for Neville is its fixed actuality, the argument for eternity as ontological ground for the harmony between essential and conditional features of *all* of time's modes does not hold up. There is a further implication in Neville's critique of pragmatism as lacking a proper account of the past, which is a risk of conflating metaphysics and hermeneutics. As Neville puts it, "hermeneutics cannot be generalized to a metaphysics itself, and...there is a distinction between truth and meaning."³⁹⁰ As Chapter Two discussed at length, however, there *is* a positive sense in which one can draw from Peirce to argue that the past is actual and has its own mode of reality, as *everything on the nested continua graph is past, and the modality of anything characterized as Secondness is its actuality*.³⁹¹ This actuality is, however, not fixed, and is divisible across a fluid and

³⁹⁰ Neville, *Recovery of the Measure*, p. 46.

³⁹¹ One might ask: "If time is understood as an existent continuum drawn on the graph, and if the modality of that which the graph contains is its actuality, as well as its being past, does this not imply that *time* itself is past? How is this not illogical, when time by definition includes present and future also?" The answer is simply that, *as an explicit object of interpretation*, the word "time," like any other sign, becomes past in the time it takes for an interpretation to encounter it. As to time *as change*, however, it cannot possibly be drawn on a graph, and must be understood in terms of emergence from absolute Firstness. Peirce pointed out this dual sense of time as follows: "Time with its continuity logically involves some other kind of continuity than its own. Time, as the universal form of change, cannot exist unless there is something to undergo change and to undergo a change continuous in time there must be a continuity of changeable qualities" (*CP* 6.132).

innumerable number of nested continua. For example, it is true that John Hancock signed the Declaration of Independence in an infinitesimal moment of frozen infinity on July 4, 1776, and it will *always* have been signed on that date. Yet in ascertaining the truth of this event, other general categories of intelligibility participate (e.g. Founding Fathers, imperial competition between France and Britain, etc) that only emerge *after*, yet have emerged before the present. These categories are distinguished in terms of earlier and later with respect for the continuum understood as “American history,” though this earlier/later relation could be extrapolated to other continua, as well: “history in general” or “temporal flow,” among others. Eternity implicitly participates in any of these “earlier” and “later” distinctions, though it need not be invoked to explain why the Declaration of Independence was an important event in American history. For nested continua, fixity is not an essential feature of past actuality, though (relative, and increasing as one nears the present) determinacy is, along with an irreducible normative value for anything determinate. It is also true that existent continua, though fundamentally *of* the past insofar as interpretation encounters them, are also the spatial field within which novel moments of emergence are presumed to arise in the future. This does not mean that the past and future are *the same* for nested continua, as the difference is one of actuality (past) versus potentiality (future as pure possibility mediated through what now exists or will exist) that share space among the graph’s continua as Secondness and degenerate Thirdness.

Rosenthal has described how Peirce’s account of time comes down to a distinction between possibility and actuality, which in nested continua terms is the

distinction between absolute Firstness at its center and Secondness as everything that can be drawn:

The difference between possibility and actuality is *not the difference between future and present, but rather past, present, and future can be viewed in terms of possibility or actuality...*When these various facets are distinguished, it becomes clear that the pragmatic emphasis on the “would-be” does not put undue emphasis on the future, and does not require that future actualizations in some sense be real now, but rather it requires that present possibilities for future actions be real.³⁹²

Part of the fundamental definition of continuity in this thesis is that although something known in its actuality is known in its past modality, that same something continues to be there in the present and future, albeit with vagueness increasing to the extent that one speculates into the future, and with changes in that something’s conditional features. What is on the graph is the past, the future is what *will be* on the graph as emergent from what has been and is there, and the present is the infinitesimal point of transformation of possibility into actuality through emergent potentiality. Another way of putting this point is that, although the space of the graph includes anything determinate, nothing *fully* indeterminate *or* determinate can be graphed, since to be graphed is to be determinate in relation (at least) to the graph, its interpreter, and anything else on the graph, yet also indeterminate based on both irremediable vagueness to some interpreter as well as the ceaseless possibility for disruptive chance novelty emanating from pure Firstness. This chance novelty, though understood in terms of interpretations emanating and making contact with existent continua as the agent for processive activity, does not mean that metaphysics is reduced to hermeneutics, for without real continua to

³⁹² Rosenthal, *Speculative Pragmatism*, p. 132.

react *against* (or to serve as the vague parameters for future potentiality), real possibility to generate the novel interpretations, or real intelligibility to bring interpretations and existent continua into relation, interpretive activity would not be possible.

The second point of Neville's critique is that understanding a harmony of essential and conditional features through some higher entity that unites them presupposes an infinite regress of ever "higher" unity and does injustice to the essential features of a given determinate entity by effectively transferring them to the unity that contains the entity, *ad infinitum*. This critique obtains at all levels of generality, though a particular target is the sense in which *time* has been mistakenly understood in Newtonian physics as a kind of absolute "container" for past, present, and future.³⁹³ As he puts it:

On the modern container theory, the creation of the world as theologically articulated would have to be represented as an event within time. What did God do before creation? Nothing? Love the divine essence? Twiddle thumbs without moving? Silly! What can eternal life (or Enlightenment or Nirvana) mean if everything is an event within a playing field and yet these events are not within the horizon of our observation? Eternal life would have to be more time later, or elsewhere, again something a bit silly and not to the religious point.³⁹⁴

Neville's target here is the Enlightenment tendency to reify the laws of physics as absolute, a tendency that repeated itself in Kant's philosophy, insofar as it meant arguing on behalf of universal principles purportedly justified by reason. It was precisely this tendency in modern thought that post-liberal theology has reacted

³⁹³ Neville's argument here is directed not so much at Peirce, but rather at a type of structural relation that, in its superficial similarities to the concentric circles of the nested continua model, warrants a response.

³⁹⁴ Neville, *Eternity and Time's Flow*, p. 7.

against, and so Neville's arguments against the container theory of time are in fact quite similar to those of Ochs, who also argues against "higher" frameworks for understanding religious traditions in history in such a way that might marginalize or neglect them on their own terms. Yet this container theory of time is not that of the nested continua model, nor does it characterize Peirce's pragmatism. Granted, concentric circles might be the worst possible metaphor in generating the interpretation that nested continua understands time in terms of containment. Also, there is a sense in which, as a temporal entity, one actually *is* contained by time, just as one is contained by history, along with anything else that renders intelligible one's interpretations (as Peirce put it: "just as we say that a body is in motion, and not that motion is in a body, we ought to say that we are in thought and not that thoughts are in us").³⁹⁵

Yet this sense of temporal containment differs from the object of Neville's criticism for at least three reasons. First, time as a circle on the nested continua graph does not deprive an entity of its essential features (which are a union of form and value, to be explored in Chapter Four as qualitative uniqueness), as these features are not in relation to other existent continua on the graph, but rather absolute Firstness and absolute Thirdness converging in an existent continuum. Second, nested continua differs from the Newtonian container theory in that it distinguishes between time as a circle on the graph, which is to say an object of interpretation that renders less general objects intelligible, and time *as change*, which cannot be made intelligible. Third, there is a categorial difference between

³⁹⁵ CP 5.173n1.

time as existent continuum and eternity as whatever is beyond the outermost imagined continuum, and this is the difference between Secondness and absolute Thirdness; in other words, whatever might be the ordinal position of an existent continuum in relation to its counterparts on the graph, this difference regarding eternity will remain.

Placing Neville's insights on time and eternity into the nested continua model requires two very important distinctions: creation *ex nihilo* as distinguished from eternity, and time as interpretive framework as distinguished from the experience of change. Regarding the distinction between creation *ex nihilo* and eternity, the former is to be equated with absolute Firstness and the latter with absolute Thirdness, and the sense in which continua gradually take on greater generality and concrete reasonableness as emergent processes play out is that in which entities become increasingly removed from the core of pure being and (hopefully) closer to the eternity of pure intelligibility as ultimate judge. This is not to declare that these two divine attributes (creator/eternity as judge) are absolutely separate, or that Firstness as creativity is not actually divine, or that the divine operates strictly as immanent within creation (these last two points characterize the process theology view that Neville convincingly argues against). Chapter Four will explore the relationship between these two absolute categories as ways of understanding the divine. The present point of distinguishing eternity and creation is simply to recognize that, as Firstness and Thirdness are categorially distinct from existence *in different ways*, so is this the case with creator and eternity. Regarding the relation of creator to creation, there are different vocabularies within which this relation can

be expressed (e.g. being-in-itself/determinate being, nature naturing/nature natured, etc), but the most apt from the point of view of the Peircean roots of this thesis is that of absolute Firstness to the mixtures of Secondness, mediate Firstness, and degenerate Thirdness that characterize existent continua. This is structurally identical to Neville's understanding of creation *ex nihilo*, in that, as he puts it, "being-itself, I shall argue, must be beyond the distinction between determinate being and absolute non-being," which is in keeping with Firstness as that which is logically monadic and thus beyond distinctions.³⁹⁶ Creation as Firstness is eternal in the sense in which it is not in time, yet eternity as referent for cognition is best seen in terms of absolute Thirdness.

To understand absolute Thirdness as eternity is to see it as a sort of absolute knowledge that, as outside the universe, can see its wholeness and its relations. Although not the same as Neville's argument for eternity, eternity as Thirdness is nonetheless necessary for time to flow, as well as an ontological context of relevant difference among determinate continua. Firstness as creation cannot serve as the context of relevant difference, since such context, as mediation, is Thirdness. Firstness, as that which is real strictly in itself, also implies an indifference to existence that Thirdness does not, since Thirdness is meaningless without existent objects to mediate; there is a sense, then, in which Thirdness engages directly with existence as its normative ideal, its "more than," its ineffable beyond. Time cannot "flow" without eternity as Thirdness, for otherwise there would be no discernment of change among actual determinate things once they have emerged out of Firstness.

³⁹⁶ Neville, *God the Creator*, p. 12.

This is because processes of change require something to change *from*, to change *to*, and some kind of continuous mediation between them. To be sure, there is a difference between degenerate Thirdness (existent interpretive norms) and absolute Thirdness (beyond human ken); the former is anything that might conceivably enter the imagination as a rule of reasoning—implicit often, but always potentially made explicit—while the latter is what gives the rule of reasoning to the imagination in such a way that one’s imagination is continuous with a world that also lies beyond it, a paradox expressed well in the apparent tautology that there is nothing one can see that is not shown, nothing one can know that is not known.

Peirce hints at this distinction in the following passage:

We must...be guided by the rule of hope, and consequently we must reject every philosophy or general conception of the universe, which could ever lead to the conclusion that any given general fact is an ultimate one. We must look forward to the explanation, not of all things, but of any given thing whatever. There is no contradiction here, any more than there is in our holding each one of our opinions, while we are ready to admit that it is probable that not all are true; or any more than there is in saying that any future time will sometime be passed, though there never will be a time when all time is past.³⁹⁷

Eternity as Thirdness is less confidently inferred than creator *ex nihilo* as Firstness, since while it is relatively easy to be aware of one’s existence and infer that there must have been *some* kind of creation for it, there is no *logical* means for moving from the postulate that there almost certainly is something beyond which one cannot think to precise knowledge on what that something is or what its purposes are. There is rather the hope that interpretations, which emerge as unitary and became discontinuous through existence, will hold together according to some kind

³⁹⁷ CP 1.405.

of ultimate mediation. Thirdness is the category of purpose as well as intelligibility, and so to posit that eternity is Thirdness is to have faith that, just as the universe has been created, so does it have some kind of ultimate purpose.

If eternity is equated with purpose, yet also inaccessible to determinate knowledge as to the nature of that purpose, then does that also mean that it is impossible to know the purpose of time, which from the human perspective is only slightly less general than eternity? Though it may not be impossible, it is certainly very difficult, for to understand time's purpose would be to posit some more general existent framework beyond time that would allow its norms to be evaluated. Time can, of course, serve as the object of scientific or mathematical investigations. In the present state of physics, there are dimensions clearly posited beyond time. Yet these remain for the moment mathematical abstractions, and despite the best efforts of, say, Madeleine L'Engle's *A Wrinkle in Time* or Brian Greene's descriptions of string theory to infuse physical theories with metaphoric and aesthetic power, the question of time's purpose has been most effectively conveyed within religious and theological communities.³⁹⁸ It is one of the major achievements of Neville's axiology to have articulated a convincing philosophical argument for the distinct normativity of each mode of time, an achievement that can be translated into the terms of the

³⁹⁸ In many cases in history, the process for the reception of some new scientific understanding is the process of infusing an abstract theory with emotional and metaphoric power, which comes *after* the theory has been introduced. One well known example of this is Alexander Pope's couplet: "Nature and Nature's Laws lay his in night: God said, 'Let Newton be!' and all was light" ("Epitaph for Isaac Newton." *Every Day in the Year: A Poetical Epitome of the World's History*. Ed. James L. Ford and Mary K. Ford. New York: Dodd, Mead, & Co., 1902). A more recent example is Richard Dawkins's *The Greatest Show on Earth* (New York: Free Press, 2009), which attempts to convey the sense of wonderment that follows from the intelligibility of Darwinian evolution. Dawkins is also a notorious critic of religious explanations of nature, having argued at length as to why science and religion are fundamentally incompatible.

nested continua model, so long as time-as-object is distinguished from time-as-experiential-change. Following Neville, the nested continua model understands the norm of the past as (not fully determinate) actuality; of the present, as (emergent) decisiveness; and of the future, as vague potentiality.

In this chapter and the one preceding, a considerable amount of space has been devoted to discussing the nature and relations among continua labeled “time,” “history,” and “faith traditions.” Each of these, including the “willful awareness” of an individual person and the “self” to which such awareness refers, are nested as a sparse simple sequence on the graph of the nested continua model. Having explored the sense of history in Scriptural Reasoning and the sense of time in Neville’s axiology, the hope is that each can be employed as a theological resource that fits into this sparse simple sequence at its own level, the compatibility between which articulates a unique relationship between a person’s individual identity and eternity. From Neville’s axiology, the model further takes certain indispensable diagrammatic resources, such as the understanding of creation *ex nihilo* as the center of Firstness, the sense in which time and eternity can be understood as bound up with one another, and a definition of truth as carryover of value from object to interpreter. From Ochs’s Scriptural Reasoning, the model takes several corrective resources, including a method of tracing the roots of errant logical binaries, a reminder of the historical contextuality of religious claims, and an encouraging link between Peirce’s Existential Graphs and his “Neglected Argument for the Reality of God.”

Chapter Four: Theological implications

And what is religion? In each individual it is a sort of sentiment, or obscure perception, a deep recognition of a something in the circumambient All, which, if he strives to express it, will clothe itself in forms more or less extravagant, more or less accidental, but ever acknowledging the first and last, the A and Ω , as well as a relation to that Absolute of the individual's self, as a relative being. But religion cannot reside in its totality in a single individual. Like every species of reality, it is essentially a social, a public affair...welding all its members together in one organic, systemic perception of the Glory of the Highest — an idea having a growth from generation to generation and claiming a supremacy in the determination of all conduct, private and public.

Charles Sanders Peirce, "The Marriage of Religion and Science," 1893³⁹⁹

The aim of this chapter is to explore the theological implications of the nested continua model, with theology understood as the discipline that draws from that which is determinate to orient attention to that which is ultimate. The central argument of the chapter is that the divine may be understood to dwell in absolute Firstness as transcendent creator *ex nihilo* and absolute Thirdness as immanent purpose and judge of that which exists, as well as in certain aspects of the existent continua of Secondness, particularly the experience of love, which joins feeling and understanding, value and form, through existent things. Having introduced the nested continua model in relation to Peirce's philosophy, addressed issues of

³⁹⁹ CP 6.429.

philosophy of history, as well Peter Ochs's and Robert C. Neville's writings, discussion now turns to the theological insights that come from examining nested continua in relation to such issues as the relation between eternity and creation, the categorial mixtures of Secondness, mediate Firstness, and degenerate Thirdness that characterize existent continua, and the claim that one may imagine oneself as the lowest order on a simple sparse ordinal sequence in which faith traditions, history, and time each serves as a successively more vague framework with its own interpretive norms. The movement of analysis will proceed through various contexts from the relatively specific to the abstract, speculating first on Peirce's own religious writings—particularly his first *Monist* series of 1891 through 1893 and the "Neglected Argument for the Reality of God," from 1908—and then on some of the leading secondary commentators on Peirce and religion, particularly Michael Raposa and Robert Corrington. Following this, the chapter will examine some of the insights that follow from a theological reading of the categories, touching upon such questions as love, normativity, evil, as well as some of the limitations of applying Peirce's work to these ends. Regarding the question of evil, in particular, a critical analysis will be made of the problem of supersessionism as a demonstration of identifying evil according to nested continua.

Peirce's writings on religion

Although Peirce was not primarily a religious writer, much of his philosophy is of a religious interest, and it has been taken in this direction not only by Ochs and Neville, but also by Michael Raposa, Robert Corrington, and other thinkers whose work will be mentioned below. That Peirce was sympathetic to religion is evident

throughout his writings, though his treatment of religion tended more toward vague moral and spiritual sentiments than theological doctrine (which he believed to be excessively sectarian). Raised as a Unitarian, Peirce converted to the Episcopal Church upon his marriage in 1863 to Zina Fay, who was at least partly responsible for his conversion to Trinitarianism (she had written on the feminist implications of Trinitarian doctrine).⁴⁰⁰ There is no evidence that Peirce ever abandoned his religious faith, although he did have a reputation for immorality among his peers that contributed to the personal and professional difficulties he faced following his termination from Johns Hopkins in 1884—his bad reputation was, in fact, a major cause of his termination.⁴⁰¹ The religious element in Peirce’s writings became more pronounced from the late 1880’s, manifesting itself notably in the *Monist* series of 1891 through 1893 and the “Neglected Argument” in 1908, but also in his Cambridge lectures of 1898 and in fragments of several of his writings from this period.⁴⁰² Although some of these other writings are cited elsewhere in this chapter,

⁴⁰⁰ Given the centrality of the triad in Peirce’s writings, the Trinitarian implications of Peirce’s three categories are of interest to Christian theology. Such implications were mentioned explicitly by Peirce once, in his Lowell Lectures of 1866, and are the central thesis of Andrew Robinson’s *God and the World of Signs: Trinity, Evolution, and the Metaphysical Semiotics of C.S. Peirce* (Leiden: Brill, 2010). Peirce’s Trinitarian reference can be found in Robin’s collection of manuscripts (*MS 359*).

⁴⁰¹ Having separated from Zina Fay several years prior, Peirce had been openly living with Juliette Portelai (also called Froissy), who became his second wife. He married Juliette in 1882, less than a week following his official divorce. For Simon Newcombe, a colleague of Peirce, these actions were morally and professionally unacceptable, and Newcombe recommended to Daniel Gilman, president of Johns Hopkins, that Peirce be dismissed (Brent, *Charles Sanders Peirce: A Life*, p. 149-153).

⁴⁰² Although the title for Peirce’s 1898 Cambridge lectures was *Reasoning and the Logic of Things*, the lectures have been generally known through the name given to them in the *Collected Papers*, “Vitaly Important Topics” (Peirce, Charles S. *Reasoning and the Logic of Things*. Ed. Hilary Putnam and Kenneth Laine Ketner. Cambridge: Harvard University Press, 1992, p. 1). The second half of volume six of the *Collected Papers* contains many of Peirce’s primary texts on religion, though its arrangement of texts is often fragmentary and chronologically misleading. For helpful commentary on Peirce’s religious writings, see Donna M. Orange’s *Peirce’s Conception of God: A Devoopmental Study* and (especially) Michael Raposa’s *Peirce’s Philosophy of Religion*. As to the biographical context to Peirce’s *Monist* series, Andrew Robinson has pointed out the possibility of a life-changing religious

of particular interest regarding the nested continua model is Peirce's *Monist* series and his "Neglected Argument."

Peirce's *Monist* series was published between 1891 and 1893, and consisted of five articles: "The Architecture of Theories," "The Doctrine of Necessity Examined," "The Law of Mind," "Man's Glassy Essence," and "Evolutionary Love." A sixth article was intended, on a general sketch of his theory of the universe, but was never finished. Featuring some of the most wildly speculative material Peirce ever wrote, these texts represent the application of Peirce's mathematics of continuity and statistics to cosmological, evolutionary, and religious ends, and also introduced his metaphysics of synechism.⁴⁰³ The departure in tone from Peirce's pragmatist texts of the 1870's in the *Monist* series was notable, and some of Peirce's colleagues (particularly Christine Ladd-Franklin, one of Peirce's former students at Johns

experience for Peirce in April of 1892, as he reported being unexpectedly compelled to receive Holy Communion while visiting St. Thomas's Church in New York (*God and the World of Signs*, p. 226).

⁴⁰³ Peirce had first suggested that physical laws might be subject to statistical analysis in 1884's "Design and Chance," and his unpublished "A Guess at the Riddle," written intermittently from 1887 through about 1890, contains many of the threads that would become the *Monist* series. The religious cosmology of Peirce's *Monist* series also bears some striking similarities to the work of Pierre Teilhard de Chardin (1881-1955), particularly *The Human Phenomenon*, published in 1955. In this work, Teilhard de Chardin presents his spiritual and scientific concerns by way of an evolutionary cosmology with striking resemblances to Peirce's own. For example, Teilhard de Chardin writes: "Love is not unique to the human being. It represents a general property of all life, and as such it embraces all the varieties and degrees of every form successively taken by organized matter...In all its nuances, love is nothing more or less than the direct or indirect trace marked in the heart of the element by the psychic convergence of the universe on itself" (*The Human Phenomenon*. Trans. Sarah Appleton-Weber. Brighton: Sussex Academic Press, 1999, p. 188). This is similar to Peirce's *agapism*, or evolutionary love. In the following passage, Teilhard de Chardin likewise shares Peirce's understanding of mind-matter continuity, which is particularly relevant to the nested continua model in its distinction between tangential (cardinally related) and radial (ordinally related) energy: "We shall assume that all energy is essentially psychic. But we shall add that in each individual element this fundamental energy is divided into two distinct components: a *tangential energy* making the element inter-dependent with all elements of the same order in the universe as itself (that is, of the same complexity and same "centricity"); and a *radial energy* attracting the element in the direction of an ever more complex and centered state, toward what is ahead" (p. 30).

Hopkins) saw these texts as evidence that Peirce was losing his mind.⁴⁰⁴ Such mid-twentieth century commentators on Peirce as W.B. Gallie and Thomas Goudge tended to agree, arguing that the *Monist* series represents the weakest part of Peirce's philosophy.⁴⁰⁵ More recent commentators such as Christopher Hookway and Carl Hausman, however, have treated these texts more sympathetically, and Michael Raposa has convincingly argued that they form a critical part of the development of Peirce's work from its earlier innovations in the logic of relations to the insights that would come to fruition in his "Neglected Argument" in 1908. The metaphysical and religious contents of these essays stem from Schelling (particularly in the claim, soon abandoned, that his metaphysics ought to be called *objective idealism*), from Henry James, Sr.'s writings on Emanuel Swedenborg, and undeniably from the Anglican Christian milieu in which Peirce spent his life.⁴⁰⁶

There are two aspects of these texts that are of particular interest to the nested continua model: the "law of mind" and *agapism*, or evolutionary love. Peirce defined the law of mind as the idea that "ideas tend to spread continuously and to affect certain others which stand to them in a peculiar relation of affectability."⁴⁰⁷ Discussed in Chapter Two in terms of its bearing on temporal continuity in relation to history, Peirce's law of mind is relevant here because of its allowing Peirce to

⁴⁰⁴ Brent, *Charles Sanders Peirce: A Life*, p. 212.

⁴⁰⁵ In *Peirce and Pragmatism*, Gallie referred to Peirce's cosmology as the "black sheep or white elephant" of his philosophy, and Goudge, in his *The Thought of C.S. Peirce*, argued that Peirce's work ought to be divided between its more rigorous logical material and its speculative metaphysics, of which the *Monist* series is the paradigmatic example (p. 7).

⁴⁰⁶ Murphey, *The Development of Peirce's Philosophy*, p. 350. Regarding the debt to Schelling, see Short's "Did Peirce Have a Cosmology?" (*Transactions of the Charles S. Peirce Society*, Fall 2010, p. 521), and for material covering Swedenborg, see Peirce's own writings on James's work, *W2*, p. 433.

⁴⁰⁷ *CP* 6.104.

retain the possibility of divine agency as irreducible to physics while also maintaining the validity of scientific inquiry. The law of mind entails a rejection of both pure determinism and pure chance—or to be more accurate, *qualifies* determinism and chance through the law of mind, which reconciles them and makes them purposive—and also denies a dualism between mind and world. Peirce presented the law of mind cosmologically, as extending from the primordial “chaos of unpersonalized feeling” in an infinitely remote past to an “absolutely perfect, rational, and symmetrical system” in the infinitely distant future.⁴⁰⁸ How are these infinitely distant poles linked? By a “series of real infinitesimal steps,” in which existent continua (the evolutionary mode of which Peirce called *anancism*—evolutionary necessity) develop according to absolute chance (whose evolutionary mode Peirce called *tychism*) to generate a novel continuum, which relates to its original counterpart by way of a principle of mediation (whose evolutionary mode Peirce called *agapism*).⁴⁰⁹ These three evolutionary modes—*anancism*, *tychism*, and *agapism*—correspond with Secondness, Firstness, and Thirdness respectively.⁴¹⁰

⁴⁰⁸ CP 6.33.

⁴⁰⁹ CP 6.302.

⁴¹⁰ In addition to the connection between Peirce’s three modes of evolution and his categories, Peirce also contextualized his evolutionary cosmology with respect to the evolutionary writings of Charles Darwin (1809-1882), Herbert Spencer (1820-1903), and Jean-Baptiste Lamarck (1744-1829). The agency in Darwinian evolution in Peircean terms is simply Firstness and Secondness alone, as chance genetic mutations intersect with existing environmental conditions that affect which biological characteristics are more likely to be “selected” for propagation. Likewise with the writings of Herbert Spencer, Peirce argued that Spencer’s evolutionary views represented Darwinian evolution reduced to the level of a mechanical necessity. As Peirce put it, Spencer’s view of evolution by mechanical principles is “illogical...because exact law never can produce heterogeneity out of homogeneity, and arbitrary heterogeneity is the feature of the universe most manifest and characteristic” (CP 6.14). Pure necessity is no better than pure chance, and Peirce spared Spencer neither as an evolutionist nor as a social thinker. In both Darwinian and Spencerian evolution, what is missing is mediation, which Peirce argued was on display in Lamarck’s understanding of biological evolution according to acquired characteristics (CP 1.104). Lamarck’s evolutionary theory has been

The cosmology that the law of mind entails is explicitly religious. As Peirce argued: “a genuine evolutionary philosophy, that is, one that makes the principle of growth a primordial element of the universe, is so far from being antagonistic to the idea of a personal creator, that it is really inseparable from that idea.”⁴¹¹ To the religious dimension of his agapistic evolution Peirce gave the name “evolutionary love,” whose biblical implications he captured in the following passage:

Everybody can see that the statement of St John is the formula of an evolutionary philosophy, which teaches that growth comes only from love, from I will not say self-sacrifice, but from the ardent impulse to fulfill another’s highest impulse....The philosophy we draw from John’s gospel is that this is the way the mind develops; and as for the cosmos, only so far as it yet is mind, and so has life, is it capable of further evolution. Love, recognizing germs of loveliness in the hateful, gradually warms it into life, and makes it lovely. That is the sort of evolution which every careful student of my “Law of Mind” must see that synechism calls for.⁴¹²

To evolution according to love, Peirce contrasted what he called the “Gospel of Greed.” This would later be called social Darwinism, in which existing social strata—whether economic, racial, or otherwise—are be justified on the grounds that those at the top were the “fittest” for their position, and thus legitimated. Peirce saw the gospel of greed as the dominant perspective of his times, with “every individual for himself, and the Devil take the hindmost!”⁴¹³ Albeit slightly unhinged

generally neglected in the wake of Darwin, yet its *logic* may be retained in light of the Peirce’s recognition of objectively general possibility (Hulswit, *From Cause to Causation: A Peircean Perspective*, p. 76).

⁴¹¹ CP 6.254.

⁴¹² CP 6.289.

⁴¹³ CP 6.293. One is tempted to see in Peirce’s language here a reflection of the dire personal straits he was in at the time these essays were written. Hiding out in New York City for lack of payment on his home in Milford, Pennsylvania, Peirce spent some of this time as a door-to-door salesman peddling encyclopedias for which he had once been asked to contribute articles (Brent, *Charles Sanders Peirce: A Life*, p. 203). Yet one finds similar expressions regarding Peirce’s attitude toward

in its language, this passage is compelling theologically because in it one finds an effort to justify a theistic worldview not by denying Darwinian evolution, but by expanding upon it. Peirce seems to be saying that the chance variation by which biological organisms evolve is but one part of a universal tendency for new forms of regularity to emerge within cosmological development, and that in order for chance to intersect with actuality in some identifiably developmental way, there must be some third principle of mediation that, across infinite time, represents teleological purpose.

Peirce's *Monist* insights are compelling, yet what these texts lack is a proper balance between their metaphysical and theological claims. That Peirce holds that synechism implies a personal creator is unequivocal, though at this point Peirce was unable to clarify whether such a personal creator ought to be grounded in synechism or vice versa—a reflection of what Ochs has called Peirce's "normative pragmatism," in which Peirce saw his architectonic efforts as an exclusive mode of interpretation for all claims, including those of theology.⁴¹⁴ Peirce himself seemed to recognize this problem. As he put it in the following passage:

A difficulty which confronts the synechistic philosophy is this. In considering personality, that philosophy is forced to accept the doctrine of a personal God; but in considering communication, it cannot but admit that if there is a personal God, we must have a direct perception of that person and indeed be in personal communication with him. Now, if that be the case, the question arises how it is possible that the existence of this being should ever have been doubted by anybody. The only answer that I can at present make is that

the intellectual perspectives of his times in earlier writings, also, notably in "The Place of Our Age in the History of Civilization," from 1863 (*CP* 8.2).

⁴¹⁴ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 103.

facts that stand before our face and eyes and stare us in the face are far from being, in all cases, the ones most easily discerned.⁴¹⁵

It is precisely the question of the “direct perception” and “personal communication” with God that Peirce addressed fifteen years later, in 1908’s “A Neglected Argument for the Reality of God,” which represents the religious aspect of Peirce’s thinking at its most mature. Rather than a single line of argument, a series of links in a chain, the “Neglected Argument” is better described as a rope wound by three threads (Peirce’s own metaphor), less “a proposition of metaphysical theology” and more “directly applicable to the conduct of life.”⁴¹⁶ The “Neglected Argument” in fact consists of three separate but related arguments, to which Peirce collectively gave the name “NA.” Unlike the *Monist* series, there are no particular grand speculations to be found in this text, but rather a *defense* of the legitimacy of grand speculations (so long as they remain playful, vague), as well as other forms of thought let free to roam across the corners of one’s imagination.

The first argument, which he called the Humble Argument, has it that, when one finds oneself in moments of thought without a particular object or agenda, the idea of harmony naturally arises in a process of free thought called *musement*. As he put it:

Play, we all know, is a lively exercise of one's powers. Pure Play has no rules, except this very law of liberty. It bloweth where it listeth. It has no purpose, unless recreation. The particular occupation I mean — a *petite bouchée* with the Universes — may take either the form of aesthetic contemplation, or that of distant castle-building (whether in Spain or within one's own moral training), or that of considering some wonder in one of the Universes, or

⁴¹⁵ CP 6.162.

⁴¹⁶ CP 6.457.

some connection between two of the three, with speculation concerning its cause. It is this last kind — I will call it Musement.⁴¹⁷

Through one's musement one comes to wonder, at ever-increasing levels of generality, how the beauty and diversity of forms can be possible. In turn, this gives rise to the recognition that to have the experience of God's reality is the highest aesthetic good one can proclaim. The second argument, which is the actual Neglected Argument to which the essay's title refers, is that the process by which one comes to recognize God's reality is of the character of a hypothetical judgment, an act of abduction explaining the cause and sustainer of the world. Although "one who sits down with the purpose of becoming convinced of the truth of religion is plainly not inquiring in scientific singleness of heart," the logical structure by which the scientist—whose inquiries seek different objects, and also play out in a much more controlled setting—and the muser experience their "eureka!" is the same. As Peirce put it: "any normal man who considers the three Universes in the light of the hypothesis of God's Reality, and pursues that line of reflection in scientific singleness of heart, will come to be stirred to the depths of his nature by the beauty of the idea and by its august practicality."⁴¹⁸ The third argument follows from this statement, referring to the pragmatic point that, upon arriving at a belief in God, one's actions will come to be shaped in such a way that does justice to the truth of the goodness of the belief.

The "Neglected Argument" is a remarkable essay, weaving together several of the most important threads that Peirce had pursued across his career. For example,

⁴¹⁷ CP 6.458.

⁴¹⁸ CP 6.467.

one finds traces of the pragmatic association between belief and habit-change: “Now to be deliberately and thoroughly prepared to shape one's conduct into conformity with a proposition is neither more nor less than the state of mind called Believing that proposition.”⁴¹⁹ One also finds the synechistic association with development and growth in terms of the three categories (now called the three “universes of experience”) that had been introduced in the *Monist* series: “In growth, too, we find that the three Universes conspire; and a universal feature of it is provision for later stages in earlier ones.”⁴²⁰ Unlike many of Peirce’s texts prior to his turn to pragmatism about 1905, one does not, however, find an implication that modes of inquiry *must* refer to a single architectonic, but instead a defense of analytical pluralism that nonetheless refuses to reduce metaphysics to science:

It is not that such phenomena [as observed in nature] might not be capable of being accounted for, in one sense, by the action of chance with the smallest conceivable dose of a higher element...But the point is that that sort of explanation leaves a mental explanation just as needful as before... Tell me, upon sufficient authority, that all cerebration depends upon movements of neurites that strictly obey certain physical laws, and that thus all expressions of thought, both external and internal, receive a physical explanation, and I shall be ready to believe you. But if you go on to say that this explodes the theory that my neighbour and myself are governed by reason, and are thinking beings, I must frankly say that it will not give me a high opinion of your intelligence.⁴²¹

The “Neglected Argument” is one of Peirce’s most enduring writings. Just as one ought to consult the “New List” of 1867 to gain a sense of Peirce’s semiotic triad, or the “Illustrations of the Logic of Science” of 1877-78 to gain a sense of pragmatism, or the *Monist* series of 1891-93 to gain a sense of Peirce’s speculative metaphysics at

⁴¹⁹ CP 6.467.

⁴²⁰ CP 6.465.

⁴²¹ CP 6.465.

its most imaginative, so should readers wishing to gain a sense of Peirce's relevance for philosophy of religion consult this text.

There are also certain particularly relevant points concerning a religious understanding of nested continua. First, the nested continua model shares Peirce's conviction that theological speculation is a matter of one's direct experience, and that there is an aesthetic component to such experience. There is also the manner in which the Neglected Argument relates to Peirce's Existential Graphs, which have provided the prevailing inspiration for the visual rendering of the nested continua graph. Ochs has noted that the Neglected Argument "may be reread as a foundational logic of indubitable belief, in dialogic relation to Peirce's foundational mathematics of Existential Graphs," which lays the "groundwork for more far-reaching speculations about the theological...context of pragmatism."⁴²² Ochs's commentary on vagueness in the Neglected Argument is also relevant to nested continua. Given Ochs's preference for Scriptural pragmatism as the preferred theological outlet for Peirce's logic, it is reasonable that Ochs might see the Neglected Argument's address to "any normal man" (rather than *this* person or community) as too vague to serve as the terminus for theological reasoning.⁴²³ However, by expressing itself *iconically*, in the form of a diagram, the graph of nested continua is intentionally vague in order to accommodate Neville's as well as Ochs's insights. By displaying its representations iconically, nested continua allows one to carry forward Ochs's method of textual reasoning as a corrective activity

⁴²² Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 228.

⁴²³ *CP* 6.467.

regarding Scripture or any other text, yet also, by remaining vague, tolerates large-scale theological speculations along the lines of Neville's axiology.

Another relevant concern for the relationship between the nested continua model and Peirce's "Neglected Argument" lies in the essay's description of the three categories. It is notable that Peirce in this text refers to God as creator of "all three universes of experience."⁴²⁴ He defined these universes as follows:

The first comprises all mere Ideas, those airy nothings to which the mind of the poet, pure mathematician, or another *might* give local habitation and a name within that mind. Their very airy-nothingness, the fact that their Being consists in mere capability of getting thought, not in anybody's Actually thinking them, saves their Reality. The second Universe is that of the Brute Actuality of things and facts. I am confident that their Being consists in reactions against Brute forces, notwithstanding objections redoubtable until they are closely and fairly examined. The third Universe comprises everything whose being consists in active power to establish connections between different objects, especially between objects in different Universes. Such is everything which is essentially a Sign — not the mere body of the Sign, which is not essentially such, but, so to speak, the Sign's Soul, which has its Being in its power of serving as intermediary between its Object and a Mind.⁴²⁵

For the most part, these definitions will be seen to inform the theological speculations to come, in which the transcendent divine creator is understood as absolute Firstness, absolute Thirdness as the immanent divine judge of that which exists and ultimate logical interpretant of the objects of religious experience, and Secondness as the universe of existent objects that one encounters in the imagination as well as everyday life. Yet what Peirce calls the "soul" of a sign, which he sees as within the universe of Thirdness, I will call the qualitative uniqueness or normativity of an existent continuum, which includes Firstness and Secondness as

⁴²⁴ CP 6.452.

⁴²⁵ CP 6.455.

well as Thirdness. Another notable point is that Peirce sees the divine as creator of all three categories, and argues that Firstness is a universe of “mere ideas.” Raposa has taken this to mean that “rather than simply actualizing certain possibilities, God in point of fact creates those very possibilities,” which are created *ex nihilo*.⁴²⁶ This is not necessarily a problem, but the nested continua model makes an extra distinction regarding Firstness, a point that is textually warranted in an enigmatic, yet encouraging caveat from Peirce (emphasis added):

It is that course of meditation upon the three Universes which gives birth to the hypothesis and ultimately to the belief that they, *or at any rate two of the three*, have a Creator independent of them, that I have throughout this article called the N.A., because I think the theologians ought to have recognized it as a line of thought reasonably productive of belief. This is the “humble” argument, the innermost of the nest.⁴²⁷

This passage is helpful because it allows that, without specifying which “two of the three” are created, Firstness might be *itself* understood in terms of absolute creation. Understanding Firstness in this way is theologically relevant, for to distinguish too sharply between the creator *ex nihilo* and Firstness as possibility would lead to contradictions regarding the traditional attribute of divine freedom. Raposa has noted this point as well:

If the vast potentiality that constitutes the vital source of everything that exists is not to be confused with that which is *merely* possible in the logical sense, then it must have been *necessary* that the world be created...Yet this argument would seem to entail the conclusion that God had no choice but to create the world, a conclusion that conflicts sharply with orthodox theistic claims concerning God’s freedom and the gratuitous character of the creation event.⁴²⁸

⁴²⁶ Raposa, *Peirce’s Philosophy of Religion*, p. 68.

⁴²⁷ CP 6.483.

⁴²⁸ Raposa, *Peirce’s Philosophy of Religion*, p. 70.

Since Firstness as pure possibility cannot enter into direct experience, the nested continua model distinguishes between *potentiality* and *possibility* respectively in terms of “mediate” and “absolute” Firstness. The former applies to infinitesimal qualitative potentialities within existent continua that give rise to the emergence of novel continua; as displayed through existent objects, mediate Firstness, as experienced, is differentiated with respect to those objects, as well as the mediating Thirdness that brings together in one’s awareness an object’s qualities with broader categories of intelligibility. The latter refers to “pure” possibility that is beyond all distinctions, creator *ex nihilo* encountered through pure chance, feeling, and novelty. While admitting that *absolute* Firstness could really be called anything, or nothing, since it is that which beyond all distinction, the nested continua graph does understand chance, feeling, and novelty in existent things to increase relative to the more immediate objects of one’s experience, which is why these objects are to be drawn as continua closer to the graph’s center.⁴²⁹

Trajectories of Peircean Philosophical Theology

For a philosopher with as diverse a range of interests as Peirce had, it is fitting that the community of secondary commentators on the religious dimension in Peirce’s work has likewise extended across a broad range of areas. John E. Smith deserves particular credit for the state of contemporary Peircean religious scholarship, which has become considerably more robust in recent decades. Smith

⁴²⁹ Robert Corrington often uses the term “Firstness” in this way as well. For example, in his *Introduction to C.S. Peirce*, he writes that “[Firstness] is the spawning ground of all of the world’s orders and supports them...The ground of the world, pure Firstness, is a heterogeneous and self-othering momentum that spawns the things of nature but has no unity of its own” (p. 40).

taught at Yale from 1952 to 1991, helping revive speculative (particularly pragmatic) philosophy of religion in American academic philosophy following the more restrictive logical positivism that had dominated the scene during the 1950's.⁴³⁰ Smith is cited as an important influence by both Neville and Ochs, and was also at Yale while Michael Raposa completed his undergraduate and masters degrees there. Neville, Ochs, Raposa, and also Drew University's Robert S. Corrington, have themselves influenced a younger generation of scholars, such as Boston University's Brandon Daniel-Hughes⁴³¹, who studied with Neville, or Leon J. Niemoczynski, whose work follows in the example of Corrington's *ecstatic naturalism*. Independent centers of Peircean religious studies have also emerged in the past three decades in Lubbock, Texas⁴³², New York City⁴³³, Exeter,⁴³⁴ Helsinki,⁴³⁵

⁴³⁰ Some of Smith's most notable books include *Reason and God: Encounters of Philosophy With Religion* (New Haven: Yale University Press, 1961), *The Analogy of Experience: An Approach to Understanding Religious Truth* (New York: Harper and Row, 1973), and *Purpose and Thought: The Meaning of Pragmatism* (New Haven: Yale University Press, 1978).

⁴³¹ Daniel-Hughes is author of *The Future of Inquiry: Charles Peirce, Naturalism, and the Symbols of the Christian Eschaton*, which explores the eschatological dimension of Peirce's thought in relation to such figures as Pierre Teilhard de Chardin and Wolfhart Pannenberg (Boston: Boston University Press, 2008).

⁴³² The work done in Lubbock applies particularly to Kenneth L. Ketner and Donna M. Orange. Orange is the author of *Peirce's Conception of God: A Developmental Study* (Lubbock, TX: Institute for Studies of Pragmatism, 1984).

⁴³³ In New York one finds Columbia University's Wayne Proudfoot, author of *Religious Experience* (Berkeley: University of California Press, 1985).

⁴³⁴ Exeter is the home of Christopher Southgate and Andrew Robinson. Southgate has explored Peircean semiotics in terms of evolutionary biology, and Robinson has constructed an argument for the Christian Trinity by way of Peirce's categories (*God and the World of Signs: Trinity, Evolution, and the Metaphysical Semiotics of C.S. Peirce*. Leiden: Brill, 2010).

⁴³⁵ Particularly regarding Sami Pihlström, whose work on semiotic approaches to philosophy of religion was conducted in his research project, *The Ethical Grounds of Metaphysics* (Academy of Finland, 2008-11).

and Copenhagen.⁴³⁶ In his book, *Charles Sanders Peirce and a Religious Metaphysics of Nature*, Leon J. Niemoczynski remarks that the “two major philosophical branches” in contemporary Peircean philosophy of religion are Michael Raposa’s *theosemiotic* and Robert Corrington’s *ecstatic naturalism*.⁴³⁷ Whether such thinkers as Neville, Ochs, or Robinson fit into this schematic is debatable (it might be more accurate to call Ochs and Robinson theologians than philosophers of religion, although Neville *is* very much a philosopher of religion, and his work precedes either that of Raposa or Corrington). Yet Niemoczynski is right to argue on behalf of Corrington’s and Raposa’s influence, and their work bears mentioning at greater length.

Raposa’s *Peirce’s Philosophy of Religion*, published in 1989, remains one of the most helpful guides available as to religious relevance of Peirce’s texts, from his youthful encounters in the 1850’s with Schiller and Kant to 1908’s “Neglected Argument for the Reality of God.” Taking the “Neglected Argument” as his starting point, Raposa reconstructs some of the primary elements of Peirce’s philosophy—triadic logic, abduction, and especially synechistic metaphysics—as indispensable features of what Raposa calls *theosemiotic*, which is the sense in which temporal signification ultimately takes meaning as part of the infinite divine mind, or as Peirce put it: “the Universe as an argument is necessarily a great work of art, a great poem — for every fine argument is a poem and a symphony — just as every true

⁴³⁶ Copenhagen is the home of Jesper Tang Nielsen (who works on Peirce and Biblical exegesis) and Niels Henrik Gregersen (whose work has treated Peirce and science and religion), as well as Anette Ejsing, author of *Theology of Anticipation: A Constructive Study of C.S. Peirce*.

⁴³⁷ Niemoczynski, *Charles Sanders Peirce and a Religious Metaphysics of Nature*, p. 13.

poem is a sound argument."⁴³⁸ Anette Ejsing has offered a helpful summary of

Raposa's *theosemiotic*:

Raposa suggests that if it is to be taken seriously that Peirce intends for an evolutionary cosmology to be the theoretical background for his philosophical system, and if his relentless commitment to the scientific method of inquiry is to be observed, it is most accurate to interpret his theological position as a theosemiotic. Together with everything else, the human mind is implanted in the divine Absolute Mind of the cosmic continuum and therefore naturally inclined to acquire knowledge of God, most especially the fundamental knowledge of God's reality.⁴³⁹

Of particular interest is Raposa's claim that "synechism is the key to understanding the religious dimension of Peirce's thought," which explicitly links the direct experience of God outlined in the "Neglected Argument" with the evolutionary cosmology of the *Monist* series.⁴⁴⁰ If the premise of the "Neglected Argument" is that if we are to know God through direct experience, then synechism, with its grand claims of continuity between mind and world and of love as objective force in the universe, may be understood as the means by which the divine makes itself known to us. Raposa also gives a balanced reading of some of the weaker aspects of Peirce's philosophy of religion, including its account of evil, which verges on Hegelian dialectical inevitability in its argument that evil is necessary and is to become reconciled into ultimate concrete reasonableness.⁴⁴¹ Raposa finds that Peirce's account of evil fails to pinpoint how some *specific* thing might be evil, which bears on a broader difficulty regarding individuality per se:

⁴³⁸ CP 5.119.

⁴³⁹ Ejsing, Anette. *Theology of Anticipation: A Constructive Study of C.S. Peirce*. Eugene, OR: Wipf & Stock, 2007, p. 140.

⁴⁴⁰ Raposa, *Peirce's Philosophy of Religion*, p. 41.

⁴⁴¹ Raposa, *Peirce's Philosophy of Religion*, p. 90.

Assuming Peirce can convince the reader that, metaphysically speaking, there are no absolute individuals, it remains unclear whether or not there can be “individuals” in any ethically relevant sense. Peirce did grant, after all, that someone or something can be individuated with respect to a given character, or from a specific point of view. Such a point of view does not negate the fact of continuity, but rather specifies those relations that are to be regarded as significant for a given purpose. For the purposes of a moral agent, one might ask, is every relation to be regarded as significant? In what sorts of relations does genuine community subsist? If the answer to the first question is “yes,” then “*A* loves *B*” is no more ethically meaningful a fact than “*A* and *B* both have brown hair.”⁴⁴²

These are valid criticisms, and Raposa has not been the only figure to observe Peirce’s difficulty with metaphysically real individuals.⁴⁴³ The problem of individuals (and evil) will be explored with regard to the nested continua model later in this chapter, and is to be particularly helped with attention to Ochs’s textual reasoning.

Though highly regarded within the field, Raposa’s understanding of *theosemiotic* has been challenged in certain aspects. For example, Peter Ochs, though generally complimentary of Raposa’s book, has argued that compared to Scriptural pragmatism, *theosemiotic* is, in certain respects, “plausible, but labored.”⁴⁴⁴ More specifically, Anette Ejsing and Leon Niemoczynski have argued that *theosemiotic* neglects Peirce’s argument for *tychism* (evolution through chance disruption), which comes at the expense of some theologically relevant aspects of his work. As Ejsing puts it:

⁴⁴² Ibid. p. 85.

⁴⁴³ The difficulty to posit individual things in Peirce’s metaphysics was also Charles Hartshorne’s chief complaint about Peirce (“Charles Peirce’s ‘One Contribution to Philosophy’ and His Most Serious Mistake,” in *Studies in the Philosophy of Charles Sanders Peirce, second series*, ed. Edward C. Moore and Richard S. Robin. Amherst, MA: University of Massachusetts Press, 1964, p. 467).

⁴⁴⁴ Ochs, *Peirce, Pragmatism, and the Logic of Scripture*, p. 287.

I question the degree to which Raposa understands tychism as an integrated part of synechism because this understanding underemphasizes tychism's systematic role as disruptive and essentially in opposition to synechism....Tychism is significantly more disruptive, unpredictable, and unruly than a harmonious evolution of the synechist continuum allows.⁴⁴⁵

Niemoczynski has corroborated Ejsing's critique:

Raposa perhaps inadvertently deemphasizes the nonrational in Peirce's metaphysics, and this may neglect other resources that are available in Peirce's religious thought.⁴⁴⁶

Ejsing and Niemoczynski are right to acknowledge the importance of chance disruption regarding a religious reading of Peirce's philosophy, though it is not necessarily the case that Raposa *neglects* it. I understand Raposa's book as a reconstructive, yet also descriptive treatment of Peirce's religious relevance, commenting upon the weaknesses as well as strengths of the religious dimension of his thought. To the extent that the non-rational is neglected in Raposa, this is, at least in part, because *Peirce* himself often wrote as if to neglect the non-rational.

For detailed attention to the religious implications of chance and indeterminacy in Peirce's philosophy, one must turn to Robert S. Corrington, whose *ecstatic naturalism* comes from "that moment within naturalism when [nature] recognizes its self-transcending character," and is "ecstatic insofar as it stands outside of itself...recognizing the utter vastness of nature."⁴⁴⁷ Developed across such works as 1994's *Ecstatic Naturalism*, 2000's *A Semiotic Theory of Theology and*

⁴⁴⁵ Ejsing, *Theology of Anticipation: A Constructive Study of C.S. Peirce*, p. 142.

⁴⁴⁶ Niemoczynski, *Charles Sanders Peirce and a Religious Metaphysics of Nature*, p. 15.

⁴⁴⁷ Corrington, Robert. *Ecstatic Naturalism: Signs of the World*. Bloomington, IN: Indiana University Press, 1994, p. 18-19.

*Philosophy*⁴⁴⁸, as well as the very helpful *An Introduction to C.S. Peirce: Philosopher, Semiotician, and Ecstatic Naturalist*⁴⁴⁹, from 1993, Corrington's *ecstatic naturalism* has been described as "a metaphysical hybrid of the pragmatic and Continental philosophical traditions," in which "nature's transcendent aspect can and does afford religious experience, but transcendence is fully natural, and so the possibility for transcendence is deeply embedded within nature."⁴⁵⁰ Although not referring to Corrington specifically, Rosenthal describes the implications of Peirce's philosophy for naturalism in a way that reflects Corrington's project in the following passage:

[Peircean semiotics] reintegrates humans and nature, not by reducing the human (as does the materialist), nor by assimilating nature to mind (as does the idealist), but by presenting an enriched nature within which are to be found the operations of those processes with which human activity is continuous.⁴⁵¹

For Corrington, nature refers to all possibility and actuality in the universe, "self-transcending" by being distinguishable into what Corrington, following Spinoza, calls *nature naturing* and *nature natured*. Nature naturing is nothing less than the pre-categorical ground of creation, "self-ejecting" and utterly beyond semiotic reach, whereas nature natured is all that has been (and currently is) created. Corrington draws from Peirce's three categories, his ontology of signs, and the "depth-field that is linked to the under-consciousness of nature" to argue that there are "sacred folds"

⁴⁴⁸ Corrington, Robert. *A Semiotic Theory of Theology and Philosophy*. Cambridge: Cambridge University Press, 2004.

⁴⁴⁹ Corrington, Robert. *An Introduction to C.S. Peirce: Philosopher, Semiotician, and Ecstatic Naturalist*. Lanham, MD: Rowman and Littlefield, 1993.

⁴⁵⁰ Niemoczynski, *Charles Sanders Peirce and a Religious Metaphysics of Nature*, p. 20-21.

⁴⁵¹ Rosenthal, *Charles S. Peirce's Pragmatic Pluralism*, p. 113.

between semiotic categories that serve as the location for a religious encounter.⁴⁵²

The possibility of the sacred thus comes from nature rather than any human projects or purposes, which are provisional at best.

Corrington's work is helpful to the present project for several reasons. First, like Raposa, Corrington is a gifted communicator of the religious dimension of Peirce's metaphysics. Corrington's understanding of transcendence also offers a vocabulary for understanding the divine in terms of absolute Firstness as pure possibility, and his sense of "sacred folds" reflects the means by which the qualitative experience of some existent thing in nature provides the most unmediated access one can have to a creator that lies beyond reach. In his emphasis on the tragic aspects of life and his recognition that nature may well be indifferent to whatever we wish for it, Corrington also serves as a healthy corrective to the triumphant march toward cosmological concrete reasonableness that one sometimes finds in Peirce's writings. Yet while respecting *ecstatic naturalism* for its own sake and as an application of Peirce's philosophy for religious speculation, this project is also considerably different from Corrington's. Primarily, the naturing/natured binary upon which *ecstatic naturalism* is predicated, legitimate in itself, nonetheless appears to imply through its "ontological sadness" that realism in theological inquiry is beyond reach,⁴⁵³ which arguably leads Corrington toward contradictory or unclear statements in his texts. For example, Corrington often employs a rhetorical device in which X is "too large" and Y is "too small," as when he

⁴⁵² Corrington, *A Semiotic Theory of Theology and Philosophy*, p. x.

⁴⁵³ Corrington, "Neville's 'Naturalism' and the Location of God." *Interpreting Neville*, p. 139.

writes of Kant that his “nature was too small and his self too large,”⁴⁵⁴ or of Neville that his “nature” is “too small” and his “God” is “too large.”⁴⁵⁵ To what does this smallness and largeness refer? These statements imply some kind of mediating principle of reasoning, some Thirdness, in order for Corrington’s readers to understand how largeness and smallness might be measured, yet by insisting upon the absence of any firm basis in nature for such inquiry, Corrington calls into question the validity of his own claims. For example, for Corrington, the primordial depth dimension cannot be known, and yet this means that it therefore must be indifferent to human purpose. History recedes in the face of nature (“consciousness is held to be in the grip of dispensations that come from the mysterious momentum of history, as if history were a kind of cosmic player that is larger in scope and power than nature”⁴⁵⁶), yet grand historical arguments nonetheless can be called upon (“from Plato to Heidegger, philosophers have elevated and made normative experiences that shadow the overwhelming majority of our semiotic transactions”⁴⁵⁷). In an essay distinguishing *ecstatic naturalism* from Neville’s work, Corrington writes: “it is one thing to say that one is ontologically sad; it is another to say why,” and that “my hope is that you will share this sadness by the end of our reflections, and that you will know the reasons why this must be so.”⁴⁵⁸ Yet “sharing,” “hope,” and “why” are all terms that imply some distinction among contexts of interpretation, and it might be argued that Corrington’s Firstness is too

⁴⁵⁴ Corrington, *A Semiotic Theory of Theology and Philosophy*, p. 2.

⁴⁵⁵ Corrington, “Neville’s ‘Naturalism’ and the Location of God.” *Interpreting Neville*, p. 144.

⁴⁵⁶ Corrington, *A Semiotic Theory of Theology and Philosophy*, p. 3.

⁴⁵⁷ *Ibid*, p. 5.

⁴⁵⁸ Corrington, “Neville’s ‘Naturalism’ and the Location of God.” *Interpreting Neville*, p. 139.

large and his Thirdness too small. This is evident in his theological claim for the placement of God in existence:

My own sense is that God is an evolutionary emergent who is struggling toward a full realization of the highest good that somehow transcends it...Yet there is a mysterious sense in which God is also a creative ground of the world...Peirce was compelled to locate an evolving God within the tensions of the hidden whence and the triumphalist longing of the whither. He leaves us partially in the dark about the whence, but makes some clear affirmations about the whither.⁴⁵⁹

Corrington's characterizations of Peirce are accurate, as the *Monist* series and "Neglected Argument" do indeed contain more "whither" than "whence" for human semiotic activity regarding the divine.⁴⁶⁰ The assertion of the "mysterious sense" of God as "creative ground of the world" is likewise well taken. It is less clear, however, why there should be a highest good that transcends the divine as "evolutionary emergent," when Corrington likewise writes: "things are on their own

⁴⁵⁹ Corrington, *An Introduction to C.S. Peirce*, p. 60.

⁴⁶⁰ There do appear to be two specific points of disagreement between Corrington's reading of Peirce and my own, the first concerning Firstness and the second concerning the status of incognizables. Concerning Firstness, Peirce wrote: "The absolutely First must be entirely separated from all conception of or reference to anything else...It precedes all synthesis and all differentiation: it has no unity and no parts" (*EP* 1.248). Corrington emphasizes the "no unity" aspect of this statement, arguing: "It is tempting to see Firstness as a unified ground or foundation of foundations. However, Peirce clearly saw that it must be pure variety, pure possibility, and pure indeterminacy" (*An Introduction to Peirce's Philosophy*, p. 40). I prefer to emphasize the "no parts" aspect of Firstness (particularly since it is logically monadic), assigning primordial undifferentiation to what I call absolute Firstness, which becomes differentiated through its interaction with existent Secondness (mediate Firstness) in the form of irreducible qualities. This sense of mediate Firstness follows Peirce's statement concerning quality: "Now a *quality* is a consciousness. I do not say a *waking* consciousness—but still, something of the nature of consciousness, a potential consciousness. A *sleeping* consciousness, perhaps" (*CP* 6.221), as well as the inextricable mixture of all three categories as found in experience: "[One will not] find any Secondness or Firstness in the phenomenon that is not accompanied by Thirdness" (*CP* 5.90). As to the question of incognizables, Peirce wrote: "There can be no conception of the absolutely incognizable, since nothing of that sort occurs in experience" (*CP* 5.255). One can either take this to mean, as Corrington does, that what is incognizable is therefore indifferent, and thus has no purpose or *agape* whatsoever. On the other hand, since Peirce's "Neglected Argument" is based on the claim that one *does* have direct experience of the divine, then my reading emphasizes the *hope* that transcendent creator and an immanent purpose of nature are in fact related, and that the divine immanence is the ultimate logical interpretant that points toward the end of existence as its dynamical object.

against the churning night of the unconscious of nature."⁴⁶¹ These questions will be pursued in the second half of this chapter, in which Raposa's *theosemiotic* and Corrington's *ecstatic naturalism* will be respectively posited as bearing on absolute Thirdness and Firstness and positioned at the outermost space and absolute center of the nested continua graph.

Theological implications of nested continua

The fundamental question of theology concerns God. Called by many names, titles, and characterizations—divine, deity, Lord, Yahweh, Allah, *ens nessecarium*, to name just a few—not all of which mean precisely the same things, this being is speculated by nested continua to dwell in absolute Firstness as transcendent creator *ex nihilo* and absolute Thirdness as immanent purpose and judge of that which exists, as well as in certain aspects of the existent continua of Secondness, particularly love, which joins feeling and understanding, value and form, through the experience of existent things. Unless a particular other term is called for, the words "God" and the "divine" will generally be used throughout the remaining discussion.⁴⁶² What does it mean to express the divine in terms of Peirce's categories? For that matter, what does it mean to understand the divine through Peirce's categories in a model of concentric circles as metaphor for our interpretive

⁴⁶¹ Corrington, "Neville's 'Naturalism' and the Location of God." *Interpreting Neville*, p. 142.

⁴⁶² Peirce himself preferred to use the term "God" instead of its more philosophically rarefied counterparts. As he put it: "God" is a vernacular word and, like all such words, but more than almost any, is *vague*. No words are so well understood as vernacular words, in one way; yet they are invariably vague; and of many of them it is true that, let the logician do his best to substitute precise equivalents in their places, still the vernacular words alone, for all their vagueness, answer the principal purposes. This is emphatically the case with the very vague word "God," which is not made less vague by saying that it imports "infinity," etc., since those attributes are at least as vague. I shall, therefore, if you please, substitute "God," for "Supreme Being" in the question" (*CP* 6.494).

experience of the world? Before these questions can be addressed, there are some logical, textual, and metaphysical hurdles to acknowledge. The first concerns the basis for the assertion that absolute Firstness and Thirdness can be described as divine. Of the three most famous types of arguments for God's reality—known as the “ontological argument,” “cosmological argument,” and “teleological argument”—there is a sense in which nested continua accommodates each in its speculations on divine reality.⁴⁶³ In another sense, however, none of the traditional arguments for God quite apply, since the model is not meant to *prove* God's reality so much as it is a means to sort through and orient one's indubitable beliefs, properly contextualize problems of interpretation to engender new habits, and venture novel abductions on the assumption that all three of Peirce's categories are real. In his “Neglected Argument,” Peirce distinguished between an *argument* and an *argumentation*: an

⁴⁶³ Probably the best-known example of the ontological argument was put forth by Anselm of Canterbury in 1078. Anselm defined God as “that than which nothing greater can be conceived”, and then argued that this being could exist in the mind. He suggested that, if the greatest possible being exists in the mind, it must also exist in reality. If it only exists in the mind, a greater being is possible—one which exists in the mind and in reality. Provided one change the term “exists” to “is real,” there is a sense in which this argument for God reflects the divinity of absolute Thirdness on the nested continua model, referring deductively from absolute Thirdness to the world of Secondness to explain why something greater than all that exists yet is in relation to it as its mediator must be real. Regarding the cosmological argument, of which famous examples are found in Aristotle's *Physics* and *Metaphysics*, as well as St. Thomas Aquinas's *Summa Theologica*, this holds that God is the first cause of the universe, the unmoved mover, as an infinite regress of efficient causes is not logically tenable. This argument bears on the relationship in nested continua between everything that is determinate and absolute Firstness as creator *ex nihilo*; while absolute Firstness cannot itself be equated with either efficient or final causation, both of which require Secondness and Thirdness, reasoning from creation to creator is akin to reasoning from existence to the pure Firstness from which creation emanates. The third argument, the teleological, is also known as the argument from design. This argument, which is also found in the *Summa Theologica* but which rose in prominence along with the development of natural science in the seventeenth and eighteenth centuries (most famously in William Paley's “God as watchmaker” analogy), holds that the observation of existent purposes and designs in nature leads one to proclaim God as designer of the designs. I understand this as reasoning from the existent continua as Secondness, with their mixtures of actuality and degenerate mediation, to absolute Thirdness as the final cause and ultimate purpose of the universe. An excellent review of the history of arguments for divine reality may be found in John E. Smith's *Experience and God* (Oxford: Oxford University Press, 1968).

“argument” is any process of thought reasonably tending to produce a definite belief; an “argumentation” is an argument proceeding upon definitely formulated premises.⁴⁶⁴ So defined, an argument includes abductive reasoning, whereas an argumentation is ineluctably deductive. The claims of this chapter are to be understood as arguments, not argumentations.

To understand the theology of Peirce’s categories according to nested continua *deductively* would be a mistake on several levels. In the first place, this would suggest a foundationalist effort with unintended similarities to that of Kant, distinguishing between a phenomenal realm (existent Secondness) and a thing-in-itself (absolute Firstness/Thirdness) which *must* be separate, with the added sleight-of-hand that whatever is real yet also non-phenomenal *must* be God. Even more problematic is the fact that a deductive reading of the categories runs into an unassailable paradox concerning the traditional attributes of divine immanence, transcendence, supremacy, and freedom. Here is the reasoning that leads to the paradox:

- (1) Firstness, Secondness, and Thirdness all participate in interpretation, albeit these categories are not “pure” since there is always something that stands beyond the mediation of interpreter/interpreted (Thirdness), there is the pure undifferentiated possibility (Firstness) that, logically monadic, cannot be interpreted, and Secondness is not interpreted so much as directly experienced as brute reaction that *gives rise* to interpretation. For this reason the nested continua model understands Secondness, degenerate Thirdness, and mediate Firstness as these the most common experiential forms of the three categories.
- (2) To read the categories theologically is to ask what from among these categorial mixtures can orient an interpreter to the ultimate, and so the model extrapolates “absolute” Firstness and “absolute” Thirdness as two

⁴⁶⁴ CP 6.456.

different ways of speculating about the divine. This is akin to asking: "what is the Firstness of Firstness?" and "what is the Thirdness of Thirdness?" A possible answer is that there is both a transcendent creator of everything determinate, categorically beyond all distinctions (absolute Firstness) and also an immanent supreme mediator/judge/maximal value/eschaton, which can be loved and hoped for as an object of faith (absolute Thirdness). On this view, the hope of religions is that the universe has a purpose, and that there are aspects of existence that reveal this purpose and provide a pathway to help realize it.

- (3) For the divine to be supreme, so it must be One. This requires that the God of absolute Firstness and that of absolute Thirdness, like the Alpha and the Omega, both be understood as divine. Absolute Firstness, logically monadic, can only be One; Thirdness, though logically triadic, can also only be One to the extent that it is absolute, since there can be only one mediator of the universe that includes all of its existent objects (and it is part of the definition of "absolute" to be singular). Two entities, both of which can only be One, must be the same thing. Yet since absolute Firstness implies God's freedom to create, whereas Thirdness logically depends on some existent set of things for it to mediate (as Peirce put it: "Secondness is an essential part of Thirdness though not of Firstness, and Firstness is an essential element of both Secondness and Thirdness"⁴⁶⁵), this implies that God is required to have created the universe *and* also not be so required. Since the same thing cannot be both free and not free, yet two things that are One cannot be different, then there appears to be an unassailable paradox in a deductive reading of Peirce's categories with respect to the divine.

Without pursuing these deductions further—the problem might lie in the definitions of the categories given in the premise, in the traditional divine attributes, or something else—it is clear that something is incorrect in associating the nature of God's reality with Peirce's categories through deduction. Another approach is required. Rather than grounding the divine in Peirce's categories, it is more accurate to assume that one *has* the belief in the divine reality already, and then explore the insights that follow from expressing such beliefs through Peirce's categories as understood by the nested continua model. John E. Smith has put the

⁴⁶⁵ CP 1.530.

matter well in saying that “rational dialectic in religion cannot perform the task it is supposed to perform unless it begins with ideas which themselves have been derived from the direct experience of the individual.”⁴⁶⁶ Maintaining both the metaphorical nature of the model and the logical objectivity of its rules, this is a way to make some of its deepest possible assumptions explicit; if these assumptions should appear objectionable, then at least they have been made public, and not passed off as irremediably bound up with the model’s logical rules, much less the divine nature itself.

Though it would not necessarily be disqualifying otherwise, it also helps that Peirce’s own texts reinforce such an abductive approach, not just regarding divine speculation, but also regarding the three categories. Rosenthal has claimed that Peirce nowhere indicates that his categories are absolute or eternal, and in fact states quite clearly that alternative categories are possible.⁴⁶⁷ She cites the following passage from Peirce:

In saying that the three, Firstness, Secondness, and Thirdness, complete the list, I by no means deny that there are other categories. On the contrary, at every step of every analysis, conceptions are met with which presumably do not belong to this series of ideas. Nor did an investigation of them occupying me for two years reveal any analysis of them into these as their constituents...I call them [universal], perhaps with no very good reason for thinking that they are more universal than the others.⁴⁶⁸

Using the nested continua model, I, like Peirce, do not see the three categories themselves as the *only* means of speculating on reality; if they were, this would ironically have the effect of denying real Firstness as the possibility that something

⁴⁶⁶ Smith, *Experience and God*. Oxford: Oxford University Press, 1968, p. 114.

⁴⁶⁷ Rosenthal, *Speculative Pragmatism*, p. 105.

⁴⁶⁸ *CP* 5.125-126.

might be other than what it is. There is the additional point that the nature of the categories is such that one cannot write or speak of them without referring to them in their existential Secondness (with the implicit participation of all three categories). Yet a lack of deductive grounding for Peirce's categories does not mean that the divine cannot be explored *in terms of* the categories, and Rosenthal is incorrect when she writes that Peirce never wrote of his categories as absolute. In an 1890 draft of "A Guess at the Riddle," Peirce held that "the reader will grant that one, two, three, are more than mere count-word like 'eeny, meeny, miny, mo', but carry vast, though vague ideas," and gave the following theological reading of the categories:

The starting-point of the universe, God the Creator, is the Absolute First; the terminus of the universe, God completely revealed, is the Absolute Second; every state of the universe at a measurable point of time is the third.⁴⁶⁹

Peirce's identification of God the Creator as absolute Firstness and God revealed as absolute Secondness may be understood as a misguided, albeit profound attempt to ascribe divine meanings to his categories. It is misguided, first, because it lacks any description of process as agency, but primarily because it makes no mention of a divine understanding of Thirdness. Peirce fails to explicate the interpretive context

⁴⁶⁹ *CP* 1362. In the same passage containing this quotation, Peirce distinguishes among three types of movement between Firstness and Secondness: Epicurean, Nirvana, and evolutionist. The first holds that change is illusion, the second that the end point resembles the first, and the third that the end point differs from the beginning. In "Logic and Spiritualism," from 1905, Peirce rephrased this threefold taxonomy in light of Arthur Cayley's projective geometry, arguing that the three types of cosmological change can be mathematically diagrammed: "1. Elliptic philosophy. Starting-point and stopping-point are not even ideal. Movement of nature recedes from no point, advances towards no point, has no definite tendency, but only flits from position to position. 2. Parabolic philosophy. Reason or nature develops itself according to one universal formula; but the point toward which that development tends is the very same nothingness from which it advances. 3. Hyperbolic philosophy. Reason marches from premisses to conclusion; nature has ideal end different from its origin" (*CP* 6.582).

in which Thirdness provides some *purpose* to the drift between First and Second, as well as the context in which the reader is meant to interpret Firstness and Secondness as divine. On the other hand, it is profound because it recognizes that the categories, understood as absolutes, elicit certain meanings that are analogous to divine attributes.

The nature of the theological insights suggested by the nested continua model—or, if one prefers, the way in which the model allows its assumptions to be made explicit—is captured very nicely in a passage from John E. Smith’s 1968 work, *Experience and God*. Smith writes:

For the philosophical mind, any account of God based on direct experience must seem inadequate...Peirce saw this problem clearly, and his solution is one that demands attention: in assaying the religious dimension of life, Peirce came to the conclusion that apprehending God is a matter of direct experience. He was unwilling, however, to put his conclusion forward as a matter of dogmatic certainty or intuition. Instead he offered an argumentation intended to support his thesis that no purely deductive argument will suffice to prove the reality of God...Peirce was thus attempting to give rational support to the thesis that the reality of God is not a matter of direct proof, but that it is instead, as he called it, a direct perception.⁴⁷⁰

This thesis shares Peirce’s approach. Though deeply apophatic regarding positively asserted claims on the divine nature, it allows for cataphatic theologizing by way of select applications of abduction, deduction, and induction whose resulting claims are understood metaphorically. The experiences upon which its metaphors are based include an awareness of existence in a world of confusion and dislocation, beauty and intelligibility, a feeling that this world has been created, and a hope that it not only has some purpose, but also affords some means of participating in

⁴⁷⁰ Smith, *Experience and God*, p. 101. Given Peirce’s distinction between an argument and an argumentation, Smith may have simply made a mistake in using the term “argumentation.”

bringing this purpose about. The model further understands that any ultimate purpose can only be made intelligible as filtered through a particular temporal, historical, and cultural/religious location. On this view, Peirce's three categories are helpful not only in terms of the explanatory power they bring to such experiences, but also the because of the distinct ways of speaking about God that they suggest. Such ways of speaking correspond to theologically relevant dispositions: awe in the face of Firstness, love in the face of Secondness, and faith and hope in the face of Thirdness.

To understand God as absolute Thirdness is to imagine a being that is like the space beyond the nested continua graph's outermost circle, which is to say continuous with it and yet also beyond it. Michael Raposa has argued that Peirce's philosophy suggests panentheism—the doctrine that God is of and also beyond existence—and this is indeed the perspective that God as Thirdness entails.⁴⁷¹ Since Thirdness, as mediation, depends on the existence of some set of things to mediate, a God so conceived cannot be indifferent to the world. Rather, it is immanent in relation to it, the ultimate form through which existent things can be judged or evaluated. As a legacy of the Enlightenment, which was characterized by the attempt to present one's claims in terms of universal reason (and from which much of the contemporary science/religion binary stems), this formal understanding of divine immanence has diminished considerably in Western culture.⁴⁷² Yet an understanding of the divine in terms of absolute Thirdness is indispensable for faith.

⁴⁷¹ Raposa, *Peirce's Philosophy of Religion*, p. 60.

⁴⁷² Neville, *Realism in Religion*, p. 23-24.

Absolute Thirdness is the ultimate source of form, since without form nothing can be understood (though things may be felt). Recalling Peirce's semiotic equation of Thirdness with argument, the divine immanence in this sense may be understood as the argument for which everything that exists provides evidence, including all of the interpretive frameworks that render human existence intelligible—time, morality, language, etc. As Peirce put it: "an argument is a sign of the truth of its conclusion; its conclusion is the rational *interpretation* of the sign."⁴⁷³ The divine in this sense thus resembles Raposa's *theosemiotic*. Supremely vague, it functions as the ultimate logical interpretant that mediates between religious symbols and the divine as these symbols' dynamical object; in prayer, one is personalizing through language this object and, through Thirdness, allowing it to serve as a source of guidance in his or her life.

The divine as understood through Thirdness implies both judgment and concrete reasonableness, which Peirce understood as the ideal terminus of evolutionary development.⁴⁷⁴ Both of these functions are expressed in the following passage from Peirce, whose definition of reason is striking in its similarity to absolute Thirdness. The passage bears quoting at length:

Consider, for a moment, what Reason, as well as we can today conceive it, really is. I do not mean man's faculty which is so called from its embodying in some measure Reason, or...as a something manifesting itself in the mind, in the history of mind's development, and in nature. What is this Reason? In the first place, it is something that never can have been completely embodied. The most insignificant of general ideas always involves conditional predictions or requires for its fulfillment that events should come to pass, and all that ever can have come to pass must fall short of completely fulfilling

⁴⁷³ CP 5.448n1.

⁴⁷⁴ CP 5.3.

its requirements...The very being of the General, of Reason, *consists* in its governing individual events. So, then, the essence of Reason is such that its being never can have been completely perfected. It always must be in a state of incipency, of growth. It is like the character of a man which consists in the ideas that he will conceive and in the efforts that he will make, and which only develops as the occasions actually arise. Yet in all his life long no son of Adam has ever fully manifested what there was in him. So, then, the development of Reason requires as a part of it the occurrence of more individual events than ever can occur. It requires, too, all the coloring of all qualities of feeling, including pleasure in its proper place among the rest. This development of Reason consists, you will observe, in embodiment, that is, in manifestation. The creation of the universe, which did not take place during a certain busy week, in the year 4004 B.C., but is going on today and never will be done, is this very development of Reason. I do not see how one can have a more satisfying ideal of the admirable than the development of Reason so understood.⁴⁷⁵

Two questions present themselves immediately. First: is development toward Reason/absolute Thirdness inevitable? Second: can it ever actually be reached? It must be acknowledged from the start that these are questions to which no certain answers are possible, though logic can provide means of distinguishing better or worse answers. Also, in the passage's invocation of creation ("going on today and never will be done") and feeling ("coloring all qualities of feeling," "pleasure"), discussion is best deferred until after exploring the question of Firstness as divine. As to whether the embodiment of Reason/absolute Thirdness is inevitable, there is a sense in which Thirdness as Peirce implies it in this passage is akin to the Logos of the Johannine Gospel, in which "the light shines out in the darkness, and the darkness did not overcome it" (John 1:5).⁴⁷⁶ It follows that if such an ideal end is

⁴⁷⁵ CP 1.615.

⁴⁷⁶ All scriptural citations come from the *New Revised Standard Version of the Notetaker's Bible* (Oxford: Oxford University Press, 2009), and, recognizing the depth and complexity of the tradition of Johannine commentary, are included in order to demonstrate possible points of theological context with regard to the philosophical notions introduced. Logos, which is a term that originated in Greek philosophy from at least as early as Heraclitus (ca. 535-475BC), has been understood as "reason,"

real, then development toward that end is ineluctable, although such ineluctability is tempered by two further points: (1) not only human knowledge, but also existent things (since these are not categorically different) are subject to spontaneous disruptions of *tychism*, and so there is always the possibility that existent things can be radically altered; (2) this idealized, capitalized form of Reason is not “something manifesting itself in the mind, in the history of mind's development, and in nature,” but is rather of a categorically different mode of reality than these things, even if in panentheistic continuity with it. It is more accurate to think of absolute Thirdness as the regulative *hope* of abduction, conferring intelligibility upon increasing ranges of phenomena across an infinite amount of time. A God so understood must be hoped for not only for our interpretations to be objectively true, but also for the sense in which there is a *purpose* for their being true. Without it, the only guide would be brute force.

As to the second question, which is whether such a state can actually be reached, this is a question that opens directly onto eschatology. The logic of Peirce’s

“word,” “expectation,” and various other terms throughout its long history. Logos is generally believed to have entered the Christian tradition by way of Philo of Alexandria (ca. 20BC-50AD), who himself appropriated the term from its Greek origins with regard to his own Hellenic Jewish context. Philo, Logos, and the Gospel of John will be further discussed in this chapter in relation to the problem of supersessionism. The Gospel of John has also had a considerable relevance to a theological understanding of Peirce’s philosophy. Not only did Peirce explicitly refer to John in his “Evolutionary Love,” but Jesper Tang Nielsen, for example, has argued that the semiotic triad and phenomenological categories shed a unique light on the father-son relationship in John’s gospel, and that Jesus can be understood as an “indexical-dicent-sinsign” of the Father. As such, the Johannine Jesus is a pure embodiment of Secondness (“The Secondness of the Fourth Gospel: A Peircian Reading,” *Studia Theologica* 60, 2006, p. 123). In Andrew Robinson’s *God and the World of Signs*, which is an effort to explore the Trinitarian dimension of Peirean semiotics in light of Darwinian evolution, Andrew Robinson has made the counterclaim that Jesus is most appropriately labeled an “iconic-qualisign” of the Father, and thus a pure embodiment of Firstness as that which is purely given and unlike any other (p. 125).

categories implies that, in its *actuality* (Secondness), a state of fully embodied reasonableness cannot be reached, at least not unless ongoing creativity and chance somehow cease. Yet even though Peirce's logic imposes a categorical separation between existence and its ultimate purpose, there is a paradox here, in that such a realization of purpose also implied to be ineluctable. For Peirce, although it is illogical to imagine that an ultimate end to the universe could ever be reached, it is even *less* logical for one not to continue hoping for this state to come about.

Understanding purpose to refer to Thirdness, he recognized this paradox as follows:

The hypothesis of God is a peculiar one, in that it supposes an infinitely incomprehensible object, although every hypothesis, as such, supposes its object to be truly conceived in the hypothesis....The hypothesis will lead to our thinking of features of each Universe as purposed; and this will stand or fall with the hypothesis. Yet a purpose essentially involves growth, and so cannot be attributed to God. Still it will, according to the hypothesis, be less false to speak so than to represent God as purposeless.⁴⁷⁷

Considering Peirce's Neglected Argument, which held that the God's reality, though directly experienced, is recognized in logic by way of the same abductive processes as other scientific hypotheses, there is a sense in which the hope for divine Thirdness—Raposa's *theosemiotic*—is directly related to the hope that *all* of our hypotheses about the world are accurate. The link between hope, eschatology, and abduction has been noted by other commentators on Peirce and religion, most recently Brandon Daniel-Hughes (*The Future of Inquiry: Charles Peirce, Naturalism, and the Symbols of the Christian Eschaton*) and Anette Ejsing (*Theology of Anticipation*). In terms of the eschatological dimension of nested continua, this is the hope that not only might the passage of interpretations through continua

⁴⁷⁷ CP 6.466

become consummated in an ideal state of absolute Thirdness; there is also the hope that the divine as absolute Thirdness and absolute Firstness turn out to be the same, and that the transcendent God who is waiting at its end and cares about its fate.⁴⁷⁸

Peirce's understanding of divine reasonableness in terms of continuous growth is a point on which the nested continua model actually implies a deeper distinction between Secondness and Thirdness than does Peirce himself. For while Peirce holds that Reason (absolute Thirdness) "must be in a state of incipiency, of growth," the nested continua model operates on the presumption that, as Thirdness, the divine immanence is unchanging insofar as it relates to Secondness.⁴⁷⁹ One might naturally ask: how, then, does it relate to existence? Recalling from the logical rules of the nested continua graph that a continuum that renders another intelligible is not *in that capacity* subject to change, but rather is an immobile frame in relation to which that which it explains changes, then the divine so conceived remains ever unmoving (yet in a sense is required for change to *happen*, since even the effect of chance variation upon some existent object or objects requires something that

⁴⁷⁸ In spatial terms, the eschatological hopes of the nested continua model imply that the two-dimensional plane of concentric circles with interpretations moving outward might actually be a three-dimensional torus, which would mean that reaching the eschaton beyond the graph's outer horizon would mean a return to its center. In non-mathematical terms, nested continua as three-dimensional torus implies that the universe might be shaped like a doughnut. Without claiming any expertise in the matter, it bears mentioning that the three-dimensional torus cosmology has had several prominent defenders in recent years (Tegmark, Max. "Measuring Spacetime: From Big Bang to Black Hole." *The Early Universe and Observational Cosmology*. Eds. Bretón, Nora, Marcelo Salgado and Jorge Luis Cervantes-Cota. Berlin: Springer-Verlag, 2004, p. 173).

⁴⁷⁹ In its function as the ideal in relation to the actual, the divine as Thirdness understood through nested continua resembles Plato's Form of the Good, in that "the Good makes all other universals intelligible," and is an absolute measure of justice (Plato. *The Republic*. Trans. G.M.A. Grube, Indianapolis, IN: Hackett Publishing, 1992, p. 508c-509a.). Unlike Plato's Form of the Good, however, understanding the divine through Thirdness does not imply that the ideal gives being to form, or itself exceeds being, though in the sense that Peirce grounded existence in Secondness, it does exceed existence.

mediates before/after the change). Another way of putting this is that the divine judgment that distinguishes right from wrong does not change, but is enacted through existent continua that *do* change in relation to *it*, and is to be apprehended by some interpreter on an aesthetic basis, through norms and through love. All existent forms of Thirdness are in some sense degenerate, though ultimate form is not degenerate, as it, like the space beyond any existent circle on the graph, contains not only everything determinate, but everything that *will be* determinate. Although it is determinate in the sense of depending on Firstness and Secondness, its form will always remain beyond reach of whatever emergent novelty occurs, just like the form of Peirce's triad itself, which is Thirdness, also lies *beyond* the Thirdness that is understood as simply one of three categories of the triad.⁴⁸⁰

An immanent God such as absolute Thirdness suggests has tremendous power, providing intelligibility through form, reference for religious symbols, and ultimate judgment on existence. Yet just as there is a distinction between reference and meaning, so is there a distinction between intelligibility and truth. Truth requires value as well as form, and includes an inescapably aesthetic referent as source of qualitative uniqueness as that which is good in itself. The aesthetic dimension of the divine raises the question of absolute Firstness. Marcel Proust memorably described perception as an "inexhaustible torrent of fair forms," and

⁴⁸⁰ Admittedly, the metaphorical structure of the nested continua model fails on this point, since the space beyond the outermost circle not only has no form, but also does not depend on the central point (absolute Firstness) for its reality. A helpful way to understand absolute Thirdness in relation to Firstness as creator *ex nihilo* is through Plato's conception of *monogenes*, expressed in the *Timaeus* as follows: "In order then that [the world] might be solitary...[the creator] made not two worlds (cosmos) or an infinite number of them; but there is and ever will be one only-begotten heaven (ouranos) created" (Plato. *Timaeus*. Trans. Donald J. Zeyl. Indianapolis: IN: Hackett, 2000, p. 31b).

while the forms may be supplied by Thirdness, the “inexhaustible torrent” certainly stems from Firstness.⁴⁸¹ As that which it is in relation to nothing else, nothing can be positively said about absolute Firstness one way or the other. It is possible, however, to speculate upon existence, in all its changing actuality and qualitative uniqueness, and imagine that everything one sees has been created, and that the mysterious void of absolute Firstness as pure possibility, novelty, and chance is the transcendent creator *ex nihilo* from which creation is an ongoing outpouring, one that is separated from creation by an impassible epistemological, even ontological divide (since nonbeing/being is a contrast pair, and absolute Firstness knows no contrasts). In the metaphoric imagination of the nested continua graph, one’s willful awareness is positioned immediately adjacent to absolute Firstness, as one’s most intimate objects of imagination and perception are those most susceptible to ceaseless change, chance disruptions, and convulsions of feeling.⁴⁸² At the same time, one’s willful awareness necessarily faces away from the center of the graph, something akin to looking away from the fire in Plato’s Allegory of the Cave and seeing shadows reflected on the wall.⁴⁸³ What one perceives is ceaselessly shifting

⁴⁸¹ Proust, Marcel. *Swann’s Way*. Trans. C.K. Scott Moncrief. Ware, Hertfordshire: Wordsworth Editions, 2006, p. 101.

⁴⁸² The effort to capture such qualitative irreducibility as appearing in consciousness was central to Husserl’s writings on phenomenology, as well as Peirce’s description of what he called *phaneroscopy*—which made reference to all three categories, not just Firstness (*CP* 1.284). Out of a very different cultural tradition, Buddhist meditative practices also reflect something of the religious dimension of seeking unmediated quality, as one will sometimes meditative for long periods on a single quality, e.g. a blueness.

⁴⁸³ Plato’s Allegory of the Cave (*The Republic*, p. 514a-520a) has Socrates recounting a parable in which a group of prisoners are chained within a cave, such that their gaze always remains fixed away from a fire behind while looking out at shadows appearing on a wall in front of them, and in which the shadows are mistaken for the real forms. For the nested continua model, the wall in this metaphor represents any of various existent continua by which one interprets the objects of experience, and the fire as absolute Firstness.

qualities reflected off innumerable existent continua, each with its own irreducible qualitative uniqueness, or as Peirce put it: “what the world was to Adam on the day he opened his eyes to it, before he had drawn any distinctions, or had become conscious of his own existence — that is first, present, immediate, fresh, new, initiative, original, spontaneous, free, vivid, conscious, and evanescent.”⁴⁸⁴

Insofar as how such an innumerable plurality of qualities relate to the pure possibility of undifferentiated Firstness, Peirce described the process as follows:

We must not assume that the qualities arose separate and came into relation afterward. It was just the reverse. The general indefinite potentiality became limited and heterogeneous. Those who express the idea to themselves by saying that the Divine Creator determined so and so...represent the ideas as springing into a preliminary stage of being by their own inherent firstness. But so springing up, they do not spring up isolated; for if they did, nothing could unite them. They spring up in reaction upon one another, and thus into a kind of existence.⁴⁸⁵

This undifferentiated-to-differentiated sequence is not so much known as it is felt and hoped for, as with an eschatology that will ultimately reunite that which is in existence divided. As will be discussed in terms of revelation, there are occasions in which the experience of novelty brings about a feeling of uplifting unity, and there are times when it brings terrifying doubt. If Peirce’s claims to primordial unity are accurate, however, change may be understood as the process by which interpretation emanates from absolute Firstness and, in its encounter at an infinitesimal point with the qualities of that which is existent, generates emergent

⁴⁸⁴ *CP* 1.357.

⁴⁸⁵ *CP* 6.199. Recalling Chapter Three’s discussion of Neville’s understanding of time as what Rosenthal calls a metaphysics of “coming together of” versus her own, Peircean “emergent continua within,” one can see why Rosenthal is right to imagine that a Peircean sense of temporality proceeds from unity to disunity; it is the hope of an immanent God understood through Thirdness that such disunity will ultimately re-converge. This passage was also cited in Chapter One’s discussion of emergence.

interpretations (some of which become their *own* continua to reflect novel interpretations through an evolutionary process, many of which do not). Objective aesthetic quality experienced as feeling is an indispensable feature of judgment, and though nothing can be said about the divine through Firstness except that it creates, whenever the world causes one to feel something in relation to it, one is experiencing its presence.⁴⁸⁶ In focusing one's interpretive gaze *exclusively* at the far-off divine immanence as ultimate horizon for existence, there is a risk of losing sight of what is right under one's nose.

Understanding Firstness as divine opens directly onto the question of revelation. As Neville has put it, revelation is "not a special kind of knowledge, but a special kind of learning," one that "puts persons and communities in touch with the divine, that engages them with the divine in transforming cognitive ways."⁴⁸⁷ Peirce's own writings on how one comes to learn something varied across his career. In 1877's "The Fixation of Belief," for example, he understood the process as an interruption of genuine doubt that stimulates inquiry whose end is reached upon the substitution of a new belief in place of doubt.⁴⁸⁸ In 1908's "A Neglected Argument for the Reality of God," on the other hand, learning about the divine plays out through the free play of musement.⁴⁸⁹ Yet whether learning proceeds through the irritation of doubt or through free play of the mind, the moment of *revelation* is

⁴⁸⁶ A famous historical example of understanding the divine in these terms is Friedrich Schleiermacher's definition of God as a "feeling of absolute dependence" (*On Religion: Speeches to its Cultured Dispersers*. Trans. Richard Crouter. Cambridge: Cambridge University Press, 1988).

⁴⁸⁷ Neville, *A Theology Primer*, p. 20.

⁴⁸⁸ CP 5.370-76.

⁴⁸⁹ CP 6.458.

through “some surprising phenomenon, some experience which either disappoints an expectation, or breaks in upon some habit of expectation of the *inquisitarus*.”⁴⁹⁰ Although the process by which the interruption becomes intelligible and is communicated to others requires Thirdness, the *experience* by which the interruption is revealed, as chance, qualitative perception, and novelty, is Firstness—in fact, it is the *lack* of any discernable Thirdness, a sense of immediacy, that makes this sense of revelation so powerful. This differs from the understanding of revelation offered by someone like Wolfhart Pannenberg, for whom “revelation is not given as an experience of immediateness, but is still transmitted to us through the channel of history”⁴⁹¹ Robert Corrington’s *ecstatic naturalism* offers deeply insightful descriptions of how nature’s “sacred folds” mark the location of the encounter with the disruptions of chance. The experience of revelation is by no means necessarily pleasant (although it can be), as the direct experience of chance disruption often throws into relief the inadequacies of one’s existing interpretive frameworks.⁴⁹² In each case some conventional expectation is upended and some kind of outside meaning floods inward, and in this case, absolute Firstness may be understood in relation to the theological concept of grace as that which is given gratuitously.

⁴⁹⁰ CP 6.469.

⁴⁹¹ Pannenberg, Wolfhart. *Revelation as History*. London: MacMillan, 1968, p. 177.

⁴⁹² Dramatic examples of revelation enacted through shattering disruption abound in the stories of Flannery O’Connor (1925-1964), which often feature characters whose comfortable habits of interpretation are upended at some pivotal moment. In Kierkegaard (1813-1855), as well, his “teleological suspension of the ethical” in his *Fear and Trembling* (1843) is a powerful theological example, in which the irony of Abraham’s being called to commit an act that any system of ethics would condemn points to the reality of revelations for which no intelligible framework necessarily available. In his *Varieties of Religious Experience*, from 1902, William James offers a helpful taxonomy of individual experiences of revelation.

Dividing discussion of the divine into respective realms of Thirdness and Firstness in this way is a helpful means of distinguishing among modes of thinking and speaking about God, as well as sorting through the theological speculations of others. Yet just as everything rendered on the nested continua graph is an indissoluble *blend* of all three categories, so also are these two ways of understanding the divine blended together as actually found in lived experience. In this regard, the present project agrees with Niemoczynski:

All life does exist within the reality of God as part of the divine life or creation, yet God's reality nevertheless directly transcends that creation, serving as its enabling power (Firstness) and as its guiding and stabilizing law (Thirdness).⁴⁹³

The absolute Firstness/Thirdness distinction in nested continua should be taken as a diagrammatic orientation for two modalities for experiencing and referring to the divine among the continuities and discontinuities of lived experience. In experience, the divine is felt (Firstness) as well as referred to (Thirdness); it is reenacted through analogy and anagogy in liturgical theology; it is inferred through attention to processive activity and encountered directly in the numinous experiences of love, musement, and terrifying doubt. It is not, however, accurate in Peircean terms to say that the divine itself *exists*. As Peirce put it:

I will also take the liberty of substituting "reality" for "existence." This is perhaps overscrupulosity; but I myself always use *exist* in its strict philosophical sense of "react with the other like things in the environment." Of course, in that sense, it would be fetichism to say that God "exists." The word "reality," on the contrary, is used in ordinary parlance in its correct philosophical sense...I define the *real* as that which holds its characters on such a tenure that it makes not the slightest difference what any man or men may have *thought* them to be, or ever will have *thought* them to be, here

⁴⁹³ Niemoczynski, *Charles Sanders Peirce and a Religious Metaphysics of Nature*, p. 61.

using thought to include, imagining, opining, and willing (as long as forcible *means* are not used); but the real thing's characters will remain absolutely untouched.⁴⁹⁴

As distinction is of the nature of existent Secondness, which Peirce called “the main lesson of life,” then one’s efforts to express either a feeling of the divine or an understanding of some divine purpose or design can only be expressed through some sort of distinction.⁴⁹⁵ What are some helpful distinctions in existence through which one might speak about the divine? The most captivating examples come from the songs and scriptures of specific communities, but in terms of Peirce’s metaphysics, an understanding of process is helpful as that in which *this* time and *that* time, *this* faith tradition and *that* faith tradition, are mediated through intelligible change, and in which all three categories are necessarily present. Reflecting on process allows one to infer that some union of chance, actuality, and mediation may be directly operative in one’s life. A helpful example was expressed by William James, who argued in his Hibbert Lectures in 1908: “God’, in the religious life of ordinary men, is the name not of the whole of things, heaven forbid, but only of the ideal tendency in things.”⁴⁹⁶ Raposa, though not referring to God explicitly, has likewise captured this same tendency in Peirce: “For Peirce, an idea is not so much the product of human intellection as it is the most significant feature of the environment within which persons live and move and have their being.”⁴⁹⁷ This is insightful, as it suggests that in practical life God is often signified by *whatever one*

⁴⁹⁴ CP 6.495.

⁴⁹⁵ EP 1.249.

⁴⁹⁶ James, William. *A Pluralistic Universe*. Lincoln, NE: University of Nebraska Press, 1909, p. 137.

⁴⁹⁷ Raposa, *Peirce’s Philosophy of Religion*, p. 11.

values the most, with valuing understood as both prizing and assessing.⁴⁹⁸ As a way of distinguishing among the experiences of God in daily life, there are two particularly helpful terms: love and norms.

It is not controversial to suggest that there is an aesthetic dimension to love. In modern culture, at least, few words are associated with as much intensity of feeling as is love, and to even be able to use the term in an academic setting is one of the joys of theology. In its theological context, love as understood by nested continua is that of *agape* love, God's love for humankind, which Peirce elevated in his *Monist* series to the status of an objective cosmological principle. From the human standpoint, such love is a kind of harnessing of aesthetic Firstness that is made that much sweeter through one's ability to recognize that it has been given gratuitously, and that intelligible objects *other than oneself* have been given gratuitously too. In this sense, love is a form of revelation. In such moments, there is passion for whatever is the existent object of one's love, yet also the wisdom of recognizing that one does not possess this object so much as understand that its *haecceity*, its irreducible "thisness," exists alongside oneself within infinity.⁴⁹⁹ Love

⁴⁹⁸ Edith Wyschogrod has given an excellent introduction to some of the critical debates that surround the respectively "prizing" and "evaluating" definitions of value. Given the power that value as both prizing and assessment implies, the tradition of twentieth-century continental philosophy (e.g. Derrida, Foucault, etc), following Nietzsche, have sought to dislodge the assessment from the prizing function of valuing, seeing hidden dynamics of power and exploitation. ("Value." *Critical Terms for Religious Studies*. Ed. Mark C. Taylor. Chicago: University of Chicago Press, 1998). In Neville's *Highroad Around Modernism*, he rightly inveighs against this dislodging as the obverse of a fact-value distinction that sees values as secondary to facts.

⁴⁹⁹ Martin Buber's *I and Thou*, originally published in English in 1937, is a classic text regarding the theological implications of understanding that within which one is in relation not as an "it," but as "you," which is a relation without bounds (New York: Scribner, 1970). Peirce's own writings on "I, It, and Thou" in 1859 mark the inception of his lifelong obsession with triads (*W* 1, p. 8). The nested continua model, for its part, recognizes the inescapability of I-It relations, and in many cases their utility; the problem is rather in the presumption of their finality. Ochs put this well in his article, "Morning Prayer as Redemptive Thinking": "The propositional way of

is the paradigm of relation (as Raposa has put it), and in such moments one feels the convergence of absolute Thirdness and absolute Firstness with so much power that it is almost as though one has picked up two wires and is jolted by the current flowing from hand to hand. Peirce put it well:

The esthetic quality appears to be the total, unanalyzable impression of a reasonableness that has expressed itself in creation. It is a Firstness that belongs to a Thirdness in its achievement of Secondness.⁵⁰⁰

Firstness, as freedom, allows one to recognize that the world did not have to be the way one sees it; it could have been otherwise, and can still be otherwise yet; Secondness, as actuality, allows one to see that here it is; it is not otherwise; it is this; and Thirdness, as intelligible relation, allows that one can know the world, it is not oneself, but one exists in relation to it and is a part of it. Yet though it is impossible to *not* love, *agape* love is not always within one's awareness, and one may still love well or badly. To love well is to apprehend the qualitative uniqueness of an existent object as a sign of the ultimate, and in that sense such love is consecration. To love badly is to misapprehend the object of love as a framework of interpretation beyond which one cannot pass, or to see it in terms of the wrong framework of interpretation entirely

Yet love as feeling fades, and one does not necessarily get to choose when it will arise again. There are also countless daily responsibilities and overlapping

judging the world is not bad in itself: it represents an essential part of every day's judgments, and is the best way to address certain phenomena and certain calls-for-action. It is simply not the only way to judge; in many cases it is not the best way; in some cases it is among the worst ways; and it becomes "bad" when it replaces all other ways." (*Liturgy, Time, and the Politics of Redemption*, eds. Chad Pecknold and Randi Rashkover; Eerdmans Pub, 2006, p. 59).

⁵⁰⁰ MS 310, p. 9.

contexts of interpretation that cannot be ignored, which brings into discussion the question of *norms* as guidelines for orienting one's actions toward these things in relation to the ultimate.⁵⁰¹ Peirce argued that the "normative sciences" of logic, ethics, and aesthetics are ordered in such a way that logic rests upon ethics, and ethics upon aesthetics; Neville's axiological claim that thinking is valuing presupposes the same thing.⁵⁰² I agree that there is an aesthetic basis to perception, and in terms of the nested continua model, this means that just as any circle drawn upon the graph bears some qualitative uniqueness, so does it also serve as a singular norm for how to interpret that which it renders intelligible. An intersection of feeling and intelligibility characterizes each existent thing as its normative quality, wherever it might be placed on the nested continua graph. Like love, normativity incorporates Firstness, Secondness, and Thirdness together, and normative value obtains at all levels of generality. This applies from the norms that characterize the modes of time to those of a given cultural or political institution, as well as one's immediate situation. For anything one encounters, it provides some *best* way to interpret it, some balance through which form and value converge uniquely in some existent object, and this normative value proceeds from object to interpreter rather than vice versa.⁵⁰³ The ethical implication of this is to orient one's awareness

⁵⁰¹ In his work, *Charles S. Peirce: On Norms and Ideals* (New York: Fordham University Press, 1967), Vincent Potter makes an excellent case as to the link between Peirce's understanding of norms and his evolutionary cosmology (p. xi).

⁵⁰² *CP* 5.535.

⁵⁰³ Part of the intention for presenting nested continua in the form of concentric circles is to recognize the qualitative uniqueness in iconic form of whatever might be drawn upon the graph. The source of (undifferentiated quality) might be absolute Firstness at the graph's center, but the qualitative uniqueness of each thing comes from its differentiation of pure quality through its own irreducible existence.

toward the uniqueness of whatever situation one is in, understanding not only that one's own awareness is a smaller circle to be drawn upon the graph within the larger one that is the situation, but also that one has the power to help bring about that which is best in that situation's qualitative uniqueness. For to do so would, in turn, have the effect of actualizing what is best in some more vague norm that *itself* possesses an irreducible qualitative uniqueness, which hypothetically may be prescinded at higher levels of generality all the way toward the divine eternity. The norm of some object may be characterized by multiple qualities, which provide the means by which one encounters an object in its existence—i.e. its hardness, loudness, green-ness, etc. Yet the norm of something is itself qualitative, and cannot be reduced to the collection of qualities by which encounters it.

The smaller-to-larger relation between oneself and one's interpretive context as circles on the nested continua graph is an important point, as it is a common error to impute interpretive priority to oneself rather than the situation (or to some other situation entirely). This speaks to Peirce's claim that self-control is of the highest importance in ethics. As he put it:

Self-control seems to be the capacity for rising to an extended view of a practical subject instead of seeing only a temporary urgency. This is the only freedom of which man has any reason to be proud...[It is] love for what is good for all on the whole, which is the widest possible consideration.⁵⁰⁴

In this passage, Peirce himself appears to risk neglecting the minutia of life for the cosmos on the whole, as the objects of daily life present normative guidelines for self-control, too. In cooking a meal, for example, one might think, "I am cooking this

⁵⁰⁴ CP 5.339n1.

meal,” or perhaps something unrelated like “I wonder whether the dynamical object can ever be captured in Peircean semiotics,” when a more appropriate perspective would be to recognize that “this meal is being cooked by me, there is a best way it can be cooked, and I have been given the chance to make this happen.” Of course, although *this* meal has a qualitative uniqueness irreducible to any other, the way one will understand it depends on norms that are more vague than the situation at hand: what time of day the meal is being prepared, what culture one is in, etc. The comparatively vague norms, i.e. “breakfast,” “full English breakfast,” are circles to be drawn around the more immediate context. In allowing for various normative contexts to be made explicit, the nested continua model aims to help one to distinguish between norms that ought to be prioritized and focused upon and those that should not.

For not all norms are good. This is not simply a question of norms being appropriate or inappropriate depending on context, but also a claim that there are norms whose qualitative uniqueness is, in fact, *positively* not good. Although all existent continua are understood to have at one time emanated from the divine transcendence of undifferentiated possibility (whose purposes for creation cannot be known, and might *perhaps* be presumed to be indifferent to our fate), and the hope is for there to be a divine immanence by which they will ultimately be judged (which nonetheless lacks, in itself, the power to actively bring about this ideal state), it is possible for some continuum to have emerged within existence whose qualitative uniqueness may be described as not only not good, but rather *singularly* evil. The question of evil is a point on which Peirce’s metaphysics have been

criticized. Raposa, for example, points out that Peirce “has problems identifying anything specific that may be considered evil.”⁵⁰⁵ For example, Peirce once wrote in a manuscript:

As a matter of opinion, I believe that Glory shines out in everything, and that any esthetic odiousness is merely our unfeelingness resulting from obscurations due to our own moral and intellectual aberrations.⁵⁰⁶

These are wonderfully uplifting words, and true enough in terms of *agape* love, yet they do give the impression that nothing singularly evil is metaphysically possible. There is an abstract answer to this point, which is that something may be considered specifically evil if its normative uniqueness, if adopted as a rule of interpretation, *exclusively* generates interpretations that imply an absolute discontinuity at any level between itself as it exists and other existent things, or between existent things themselves, like some obstruction embedded in a river that causes the current to flow into two separate oceans.⁵⁰⁷ This is an ontological crime, as an absolute discontinuity between some existent thing and another negates any possibility of a divine immanence in relation to which all things are continuous (although not divine transcendence understood as Firstness, with which all things are *discontinuous*, as a plurality of things being discontinuous with something does not necessarily make that plurality continuous among itself). More than this, it almost certainly leads to violence, and at a minimum forecloses access to divine

⁵⁰⁵ Raposa, *Peirce's Philosophy of Religion*, p. 90. To make his case, Raposa quotes such statements from Peirce as “whatever is, is best” (*MS 970.1 1ff*) and “evil may be regarded as one of the perfections of the universe” (*CP 6.479*). Raposa is right that Peirce’s texts do not provide a strong account of evil, nor offer a program for how one might respond to it.

⁵⁰⁶ *MS 310*, p. 9

⁵⁰⁷ To be clear, the existent qualitative uniqueness of singularly evil norms is real; the absolute discontinuity among existent things that such norms exclusively imply is not.

agape love regardless of context. Secondness unrelieved by Thirdness—which an absolute discontinuity among existents would imply is all there is—is indeed *brute* actuality. To be the “best” that one can be in acting upon a singularly evil norm is not to do good, but rather to promulgate what Peirce called a “metaphysics of wickedness” that says “I am altogether myself, and not at all you.”⁵⁰⁸ A very small number of norms *exclusively* generate interpretations implying absolute existent discontinuity.

Insofar as the nested continua model understands singular evil in terms of the qualitative uniqueness of some existent object, the question of acknowledging singular evil bears an eerie resemblance to *agape* love. For both necessarily involve the recognition of an object’s *haecceity*, its irreducible “thisness,” and there is thus a sense in which singular evil represents love gone sour, as somehow turned inward onto itself in the object. In both *agape* love and singular evil, in recognizing the qualitative uniqueness of an object, one is experiencing that object’s “thisness” in relation to the ultimate, marveling at the fact that such a vast and seemingly indifferent universe could contain something so unique, regardless of whether the uniqueness is beatific or horrifying. The essential difference is that whereas an object seen through *agape* love opens onto some immanent concrete reasonableness, however unknowable (which is to say, semiotically, that one looks *through* it onto the ultimate), something seen as singularly evil appears to be concrete yet have no reasonableness. Its normative uniqueness seems to fit within no interpretative circle at all, but is simply separation: “force without law or reason,

⁵⁰⁸ CP 6.571.

brute force.”⁵⁰⁹ The interpretations that it generates according to its norms may be in continuity with it, and entire institutions may be built from it that operate reasonably insofar as they are in accordance with those norms. Yet when one looks at its normative uniqueness *itself*, one sees an absolute discontinuity. This absolute discontinuity is a function of the normative uniqueness in its Secondness and Firstness, which is to say its existential aspect as divorced from Thirdness. On the nested continua model, singular evil is understood to have emerged, like anything else, from some order of existent continua, and though its qualitative uniqueness might imply an absolute discontinuity upon its being adopted in interpretive action, its ontological status is no different than other existent continua, which is to say as positioned between Firstness and Thirdness as a blend of Secondness, mediate Firstness, and degenerate Thirdness. There is also the irony that as soon as something has become thought of as singularly evil, it has ceased to be singular, since it has been lassoed by the interpretive circle “things that are singularly evil,” which is the first step toward properly identifying it.

It is far more common for norms to *sometimes* generate interpretations that imply absolute discontinuity among existent things than it is to exclusively do so, and to these cases may be attached the term *accidental* evil. These are cases in which acting upon a given norm may be appropriate in a certain context but not in another. The problem in such cases lies with interpretation rather than some essential feature of an object itself, though the harm done by accidental evil is hardly less damaging to those who participate in it (as well as those who feel its effects). A

⁵⁰⁹ CP 1.532.

very common type of accidental evil is to place too much emphasis on one norm of interpretation, which is to overdraw its context of relevance. Earlier in this chapter, God in practical life was described as signified by whatever one values the most. This is precisely the norm that is most liable to cause accidental evil, for in its being valued so highly it runs the risk of *standing in* for God rather than *pointing toward* God. A good way to describe accidental evil in terms of the nested continua model is through the distinction between what might be called *opaque* and *translucent* circles of interpretation.⁵¹⁰ A circle is translucent if one interprets through it, like the Apostle Paul's example of the glass through which we see, darkly. One cannot help but interpret the world through the innumerable lenses it provides, yet the hope of religion is that the ultimate provides existence with some means of pointing beyond itself.

A circle is opaque if nothing can be seen beyond it. An opaque circle has the effect of distorting everything it reflects, as everything appears zero-sum if only viewed according to one interpretive framework. When one encounters an errant logical binary in an argument, it is likely that this binary has been generated, however implicitly, by an opaque circle of interpretation. For while there is nothing intrinsically wrong with binary distinctions, to claim that some binary is *always* the case implies that no other interpretive circle is possible other than that in which the

⁵¹⁰ Jean-Luc Marion's *God Without Being*, though written from a self-consciously post-modern philosophical standpoint that denies metaphysical realism, offers a very helpful theological parallel to this distinction between opaque and translucent circles of interpretation in his distinction between an idol and an icon. For Marion, an idol is something to look towards, to fixate one's gaze upon, yet stops and delimits one's view such that nothing can be seen beyond it (Chicago: University of Chicago Press, 1995, p. 11). An icon, on the other hand, is something that opens the gaze of the infinite upon the viewer, something that opens onto something beyond itself (p. 21).

distinction arises. It is through this implying of some absolute discontinuity (whether between that which is distinguished explicitly or between an opaque circle of interpretation and all other circles on the graph) that an opaque circle of interpretation is responsible for accidental evil, which almost certainly generates suffering of some kind—particularly unfortunate because, as Ochs puts it: “the logic of suffering is also a logic that suffers—that teaches exclusion and consequently can lay the groundwork for more suffering.”⁵¹¹ In such cases, accidental evil can have the same practical effect as singular evil in its foreclosing the possibility of experiencing the proper intersection between aesthetic feeling and intelligibility that characterizes *agape* love, and so an opaque circle of interpretation, theologically speaking, is hell. When one encounters in Dante’s *Divine Comedy* the allegory of hell as a nest of inescapable circles, the metaphor is well taken.

There are three types of opaque circles of interpretation. The first type is characterized by explicitly conflating some interpretive framework with absolute Thirdness. Ideological fervor and dogmatism fall into this category, as these operate by way of some single exclusive framework that is raised up as that to which all else must conform. Anything that does not reflect its ideal norms is at best neglected or condescended to, and is often made to suffer violence based on a perceived lack of value in relation to the ideal—the ultimate judgment beyond existence with is conflated with judgment here and now. The second type of opaque circle is perhaps more common, which is to implicitly conflate some existent interpretive framework with the source of aesthetic pleasure: absolute Firstness. It is true that an existent

⁵¹¹ Ochs, *Another Reformation*, p. 8.

continuum does bear existent qualitative uniqueness as an objective value, and seeking after pleasure is, of course, very rarely a conscious effort to seek the transcendent creator *ex nihilo*.⁵¹² Yet there is a distinction between recognizing the aesthetic value of an object and believing that the object is *itself* the source of aesthetic value, and to overlook this distinction is to remain perpetually dissatisfied by a craving that cannot be fulfilled. The ease with which love shades over into pain is an example of an opaque circle conflated with Firstness, as are many types of addiction. In such cases one misinterprets both the object of desire and oneself, sacrificing everything for what once brought so much pleasure but now brings steadily less. The third type of opaque circle of interpretation is the most common of all, which is not conflated especially with either Thirdness or Firstness, but which is simply an unconscious habit of reasoning that refers objects to inappropriate contexts of interpretation. Many of these come and go with the moment, as, for example, when one gets agitated while stuck in traffic and sees the other drivers as though they were nothing more than obstacles in one's way. Yet some of these unconscious interpretive habits persist as prejudices that imply deeper distinctions among objects than is appropriate, and which may or may not reflect some past pain experienced by the interpreter.

⁵¹² The idea that the search for pleasure might be superseded by a primordial drive toward nothingness was the central argument of Sigmund Freud's *Beyond the Pleasure Principle*, from 1922, which remains one of his most controversial works (London: International Psychoanalytic Press, 1922). Intriguingly, in chapter four of the work, Freud describes the inception of consciousness in terms that resemble the nested continua understanding of willful awareness as facing outward onto the world (p. 26-27).

The problem of supersessionism

These are vague speculations as to how the nature of evil and the suffering it brings might be expressed in terms of the metaphysics of nested continua. They stem from considering the hermeneutic and ontological implications of love and suffering in relation to the transcendent ground and immanent purpose of lived experience. Yet the abstract claims that nested continua entail remain incomplete unless accompanied by more practical questions of how one might identify something as evil, as well as what one might do about it. Since metaphysics is the discipline that seeks to examine what categories of experience might be found at the most general level, it is easy for one to slip into inadvertently facile explanations for evil and suffering in such a way that provides no help in one's actual *experience* of it.

For example, in the following passage, Peirce wrote:

A religious organization is a somewhat idle affair unless it be sworn in as a regiment of that great army that takes life in hand, with all its delights, in grimmest fight to put down the principle of self-seeking, and to make the principle of love triumphant...Fall into the ranks then; follow your colonel. Keep your one purpose steadily and alone in view, and you may promise yourself the attainment of your sole desire, which is to hasten the chariot wheels of redeeming love!⁵¹³

Yet this is not a particularly helpful passage. Although it is very true that love ought to triumph over "self-seeking," Peirce's advice to "fall into the ranks" and keep to "one purpose" offer little in the way of guidelines for identifying a specific wrong and acting to correct it. A much more effective resource is to be found in Ochs's textual reasoning, which aims to diagnose problems in relation to the unique norms of a particular context. Particularly in terms of what has been called accidental evil,

⁵¹³ CP 6.448.

to attempt to reconstruct the interpretive habits that lead to problems is an exercise in healing.

As for what has been called singular evil, there is a sense in which it might be more difficult to claim something as such, since an object whose interpretive responses *always* imply some absolute discontinuity would require an observer to verify that no countervailing examples exist. On the other hand, the impact of something singularly evil is also likely to be more widely felt, affording some moment at which an abductive claim, “X is singularly evil,” might be made, at which point the only appropriate response is first to mitigate that object’s ability to generate harmful interpretative responses, and *then* to seek to understand its source. For although the qualitative uniqueness of something singularly evil provides no context itself for how to interpret it, one must operate on the presumption that there are nonetheless interpretive contexts from which it, like anything else, emerged, and which may be identified as its efficient causes. In the sense that identifying something as singularly evil is to render it intelligible, to *understand* it, this has the effect of bringing it in line with some kind of reasonableness. The metaphor of vaccination is appropriate, since treating the *symptoms* an infectious disease cause by a virus is ultimately less effective than introducing through a vaccine a *replica* of the virus, which can only be done by understanding exactly what a virus is and how it functions. As Raposa has observed: “It is...resemblance between the observed configuration of facts and the pattern of expectations generated by a given belief or system of beliefs that is the source of

abductive insight.”⁵¹⁴ Whatever affront such evil may be to the divine, an abductive claim identifying it can only be made within the context of one’s own norms, and will be effective to the extent that it also recognizes the broader existent norms from within which the evil emerged. Though the appropriate response to accidental evil is compassion, and to singular evil mitigation, the diagnostic process that allows one to identify these as such is the same. In terms of the nested continua model, this implies an ordinal arrangement of circles at successive degrees of generality, hypothesizing as to the appropriate level of generality at which the source of an errant discontinuity arose, and starting from the most local context possible.

An example of how something singular evil might be identified and repaired according to the nested continua may be observed in the problem of supersessionism. Supersessionism has been defined by Peter Ochs as follows:

Belief that with the incarnation of God in Jesus Christ, Israel’s covenant with God was superseded and replaced by God’s presence in the church as the body of Christ. Otherwise stated, this is the Christian belief that God’s love for the church replaced his love for Israel.⁵¹⁵

On the definition of singular evil as that whose norms exclusively generate interpretations implying absolute discontinuity among existent things, the hypothesis to be interrogated is that supersessionism is an example of singular evil. This hypothesis is based first on the fact that, in terms of the metaphysics of nested continua, the logic of supersessionism is errant. This is because the claim that the historical, temporal event of the Incarnation *replaced* one people’s covenant with God with another implies that history and time may be reduced to binary terms:

⁵¹⁴ Raposa, *Peirce’s Philosophy of Religion*, p. 135.

⁵¹⁵ Ochs, *Another Reformation*, p. 1.

before X/after X. By associating this before/after with the ultimate, supersessionism has the further implication that history represents the *absolute* continuum by which all events are to be exclusively measured, which would mean that there is nothing *beyond* history to which human religious experience might refer; in other words, history becomes an opaque rather than translucent framework. Not only would reducing all interpretive guidance to history or time negate the Christian message of a divine relationship with the world (and foreclose the possibility of salvation through Christ, since the historical Jesus is separated from the present by two thousand years); it would also deny the sense of contingency that is central to the Incarnation as an embodiment of God's love—i.e. God did not *have* to intervene in history, nor did God *have* to intervene in *this particular* moment in history. The hypothesis that the norms of supersessionism represent singular evil is also reinforced by the empirical fact of the Shoah, whose reality lies within historical memory, and which was predicated on an absolute discontinuity between Jews (along with other individuals undesirable to the Nazi leadership) and non-Jews. This hypothesis, then, is based on identifying in supersessionism an errant binary, recognizing uniquely Christian norms that contradict supersessionism, and pointing to empirically available evidence to reinforce the urgency of the problem.

Venturing a hypothesis that something is a problem is not the same as uncovering the *specific* causes that generated the problem that the hypothesis purports to identify, but rather is its first step. There are two further analytical steps in order to proceed: (1) seeking to identify the source of the problem at its

most local context possible—in the case of supersessionism, this would be the history of the Christian tradition, particularly the Patristic period (second through fifth century AD) in which the doctrine of supersessionism first arose; (2) hypothesizing that the level of generality—in nested continua, the circle of interpretation—that will be identified as the source of the problem also contains norms by which the problem might be repaired. The first step is important because, without it, one might be tempted to refer the problem to a higher level of generality than is warranted, which might look like the following: “supersessionism is evil, since Jews and Christians are alike in being human beings, and it is evil for one group of human beings to want to eliminate another; since supersessionism is a fact of the history of the Christian tradition, therefore one cannot be both Christian and not be supersessionist; the answer is to not be Christian.”⁵¹⁶ The second step is important because, if some reparative normative resource can be found within the same tradition that generated the problem, then the tradition itself need not be identified as the source of the problem; this is to say that while *supersessionism* might represent singular evil, Christology itself does not.

In his book, *Another Reformation*, Peter Ochs investigates the question of supersessionism in relation to several contemporary Christian theologians whose work is associated with post-liberalism. His thesis is that a given Christian theologian’s tendencies toward non-supersessionism are displayed in precise

⁵¹⁶ This view is exemplified in Rosemary Ruether’s *Faith and Fratricide* (Eugene, OR: Wipf & Stock, 1996), which argues that Christology *itself* is the problem. Since Christology necessarily engenders supersessionism, Christians are faced with the either/or choice of affirming Christology or freeing themselves of the evils of supersessionism.

proportion to his or her tendencies toward post-liberalism, and vice versa.⁵¹⁷ This is a bold claim, and considering Chapter Three's commentary on the risks of implicit historicism in post-liberal theology, it is a claim of which I am not entirely convinced. Yet insofar as Ochs recognizes that it is the *logic* upon which post-liberalism's claims are based—rather than the claims themselves—that save it from supersessionist tendencies, his thesis is well taken. In the book, Ochs identifies four logical elements of what he calls “pragmatic repair”:

- a. Context-specificity: the repair addresses the conditions of suffering they are meant to repair
- b. Relationality: the repair binds together sufferer, agent of repair, and source of repair
- c. Vagueness: the rules of repair cannot be diagrammed independent of this specific activity of repair
- d. Recognition of the ultimate source of repair: God⁵¹⁸

From these elements follow a number of relevant points. First, human reason is, in an ultimate sense, *God's* reason (referring to the immanent God of absolute Thirdness), and though “God's reason is embedded in the orders of creation,” and one may observe “*that* it is there,” there is no way to “articulate its universal character through any finite set of humanly constructed propositions.”⁵¹⁹ Second, recognizing something as problematic is not equivalent to the immediate presentation of a solution, as the “perception of suffering stimulates a desire for non-suffering but no means of contributing actively to that non-suffering.”⁵²⁰

⁵¹⁷ Ochs, *Another Reformation*, p. 1.

⁵¹⁸ Ochs, *Another Reformation*, p. 17.

⁵¹⁹ *Ibid.* p. 4.

⁵²⁰ *Ibid.* p. 10.

Third, investigating the problems of a given tradition requires the effort to reconstruct that tradition's qualitative uniqueness, which is to say the *norms* that, as Ochs puts it, are "embedded within the practices and histories of those institutions, but not necessarily visible to contemporary practitioners and leaders."⁵²¹

Concerning the hypothesis that supersessionism is a singular evil, the process of identifying its origins requires pursuing the historical conditions in which it emerged with respect to Christian norms. Since the claim of supersessionism is that God's covenant with the Jews was replaced in the Incarnation, investigation with respect to Jewish norms is also helpful.

To begin such an investigation, a very helpful guide is Daniel Boyarin's *Border Lines: The Partition of Judeo-Christianity*, which is an effort of what Ochs might call "pragmatic historiography" that traces the genealogy of Jewish-Christian relationships from the second through the fifth centuries in order to identify points of divergence. On the premise that "the borders between Judaism and Christianity have been historically constructed," the book's thesis is that a particular source of the partitioning was "heresiology, the extraordinary practice of anatomizing, pinning down, making taxonomies of Christians who are not somehow 'in'."⁵²² As the delineation of orthodoxy in Christian communities arose in the second century in an ongoing effort to define the identity and mission of the Christian Church, so too did heresy arise as its logical antimony.⁵²³ In nested continua terms, this is akin to

⁵²¹ Ibid. p. 6.

⁵²² Boyarin, Daniel. *Border Lines: The Partition of Judeo-Christianity*. Philadelphia: University of Pennsylvania Press, 2004, p. xi.

⁵²³ Ibid. p. 3.

the example given in Chapter Two regarding the category of “Italian Renaissance” as a subsequent, yet enduring category of interpretation for such preceding phenomena as the Sistine Ceiling, arising afterward and yet becoming an interpretive framework for that phenomenon. In light of the phenomenon that had been the life of Jesus, Christian communities in the century after his death began to generate categories through which his life might be interpreted in their own practices, categories that became the fundamental vocabularies of Christian theology. Boyarin’s claim is that, rather than directly labeling the Jews as heretics, Christian leaders during this time labeled *other Christians* as heretics for exhibiting traits shared by Jewish communities—and that these leaders’ Jewish counterparts, the Rabbis, reciprocated.⁵²⁴ For both Christians and Jews, a key source of the guiding principles for determining the community’s boundaries was Scripture.

At no point does Boyarin claim that Scripture itself is to blame for supersessionism, but rather that the central role that Scripture played in Patristic heresiology demands attention to how certain texts could have been interpreted in such a way as to generate exclusion. J.D. Crossan has corroborated Boyarin’s argument that Scriptural interpretation became a key means of defining orthodoxy:

The question above all was this: Do *we* have a future? Like any people asking if they have a future, they went back into their past to see what it might indicate. Searching the Scriptures was internally constitutive for their faith and their identity, not just externally useful for their debates and arguments. They knew, of course, what they were looking for in those texts⁵²⁵

⁵²⁴ Boyarin, *Border Lines*, p. 3.

⁵²⁵ Crossan, John Dominic. *Who Killed Jesus? Exposing the Roots of Anti-Semitism in the Gospel Story of the Death of Jesus*. San Francisco: Harper-Collins, 1995, p. 12.

The Gospel of John emerges in both Crossan's and Boyarin's accounts as a particularly significant text to the partitioning of Judaism and Christianity, as the Johannine description of Christ as Logos not only resonated with fundamental aspects of both Christianity and Judaism, but led to particularly heightened emphasis for the *text* as the highest interpretive guide for determining orthodoxy.⁵²⁶ The impact on both Jewish and Christian communities was dramatic. As Boyarin puts it:

For the Rabbis, Torah supersedes Logos, just as for John, Logos supersedes Torah. Or, to put it into more fully Johannine terms, if for John the Logos Incarnate in Jesus replaces the Logos revealed in the Book, for the Rabbis the Logos Incarnate in the Book displaces the Logos that subsists anywhere else but the Book. This move on the part of the Rabbis at the end of the rabbinic period effectively displaces the structure of Western thought, embodied in the Fourth Gospel, whereby Logos is located most directly and presently in the voice of the speaker, Jesus, with the written text understood at best as a secondary reflection of the speaker's intention.⁵²⁷

In the reception of the Johannine text, Christians and Jews thus diverged by way of two different modes of theological interpretation: for Christians, Christ as Logos; for Jews, Torah as Logos. An effect of this was also to shape the interpretive frameworks by which Old and New Testaments were interpreted. Guided by a hermeneutic in which Christ as Logos provided the defining measure of Scriptural interpretation, the Christ-event as told in the Gospels could also be interpreted as having superseded the biblical narratives of God's covenant with the Jews as told in the Old Testament. As Ochs has put it, rather than reading each Gospel "as *itself* a rereading of the Old Testament narratives of the history of Israel," a supersessionist

⁵²⁶ Boyarin, *Border Lines*, p. 128.

⁵²⁷ Boyarin, *Border Lines*, p. 129.

hermeneutic meant that “if the Synoptic Gospels as well as Paul draw distinctions between non-Christian Jews and Christian Gentiles, then the one must be unredeemed if the other is redeemed, the one unloved by God as the other is loved.”⁵²⁸ Acknowledging the complexity of supersessionism’s history in the centuries since it arose, as well as the likelihood of its having had *multiple* origins, a viable further step in investigating supersessionism is thus through attention to the Johannine text.

There are at least two themes uniquely found in the Gospel of John that may have contributed to the doctrine of supersessionism. The first is the recurrent presence of terms related to temporality, replacement, and stratification. For example, in the text, Jesus states: “Very truly I tell you, before Abraham was, I am” (8:58). In Jesus’ last discourse to his disciples, as well, he speaks as someone both still in the world and yet no longer (16:5; 17:11). This language of temporality is complemented by a similar emphasis on replacement, in terms of a seeming binary between the community of Christ and the Jewish community, or of the replacement of one Jewish feast by another. On this point, Raymond Brown has argued that such emphases on replacement might be traced to resentment among the Johannine community toward the Jews in their particular historical situation, including a consequent desire to see divine replacement of one community for another.⁵²⁹ If Brown is correct, then this transference from historical to divine replacement is also reflected in the language of stratification one finds in the text. For example, in the

⁵²⁸ Ochs, *Another Reformation*, p. 18.

⁵²⁹ Brown, Raymond E. *An Introduction to the New Testament*. New York: Doubleday, 1997, p. 375.

dialogue of Jesus and Nicodemus, Jesus explains that only by way of an agency that comes from above might one enter the kingdom of God, whereas flesh can only come of flesh (3:6), and that in temporal life, “we speak of what we know and testify to what we have seen” (3:11). The asymmetry in the relationship between *higher* and *lower* might generate the conclusion that Jesus (higher) *replaces* one’s temporal existence (lower), including that of God’s covenant with Israel.

The second theme within the Johannine text that might potentially generate supersessionist readings is through the preponderance of semiotic terminology, particularly in its prologue. From its first verse (“In the beginning was the Word, and the Word was with God, and the Word was God”—1:1), the prologue paraphrases the book of Genesis to describe Christ as a divine being who comes into the world and becomes flesh. Although not of the world, the Word is made intelligible with reference points directed to human understandings in the world, with semiotic intelligibility understood as a gift reflecting God’s enduring love for the world. Yet the ambiguity of Christ as Word, when combined with the theme of replacement discussed above, might have been taken to mean that the gift of Christ replaced the loving gift of the law through Moses. As N.T. Wright has noted:

The Prologue has already told us that Jesus is “the only-begotten God”—an extraordinary and unique phrase, saying simultaneously that Jesus is one with the father and yet to be distinguished from him. He is, in fact, the Word who was always with God, who was always God, yet who has now become flesh. But when we put ourselves back into the minds of the eager Galileans and Judeans coming to John for baptism, we realize that they would understand the phrase to mean that Jesus was the Messiah, the true king, who would free Israel from pagan domination.⁵³⁰

⁵³⁰ Wright, N.T. *John for Everyone*. London: SPCK, 2002, p. 12-13.

In their work, *Paradise in Antiquity*, Markus Bockmuehl and Guy Stroumsa have likewise noted how symbolism in the Johannine text, when read without a proper understanding of historical circumstances, has contributed to a misplaced sense of conflict between Christians and Jews. Referring specifically to its imagery of the garden, they write:

It is extremely likely that the mention of the garden, and indeed of a garden in the Kidron Valley (18.1), in the Gospel of John was intended to make an extremely important symbolic point: the tomb of Jesus, like that of David and other Davidic rulers, is located in a garden...The implicit statement is that Jesus is the legitimate heir of David and the Messiah of Israel.⁵³¹

As to why such garden imagery might have been misconstrued in terms of supersessionism, the authors venture the following explanation:

A false dichotomy between historical events and sites on one hand and their potential theological symbolism on the other...leads to an erroneous conclusion with regard to one of the most highly charged symbolic statements in the Gospel of John.⁵³²

As Brown has pointed out, the word “sign” in the Johannine text appears either as *ergon* or *semeion*, meaning “work” or “sign,” respectively, rather than *dynamis*, meaning “mode of power.”⁵³³ The sense of signification as “work” rather than “power” reflects the heritage of wisdom terminology in the Old Testament, as well as Philo of Alexandria having appropriated the Logos terminology from its Greek origins for his own Jewish tradition. The commonality of the Logos among Christians and Jews, as well as Philo’s influence on the Johannine text, might seem to speak to a hermeneutic continuity between the and New and Old Testaments, and

⁵³¹ Bockmuehl, Markus and Guy Stroumsa. *Paradise in Antiquity: Jewish and Christian Views*. Ed. Markus Bockmuehl and Guy G. Stroumsa. Cambridge: Cambridge University Press, 2010, 27.

⁵³² Bockmuehl and Stroumsa. *Paradise in Antiquity*, p. 27.

⁵³³ Brown. *Introduction to the New Testament*, p. 339n.

thus point away from supersessionism. Yet as Boyarin noted, Christians and Jews came to understand the Logos according to distinct modes, and it was in the interests of each community to define Logos differently.

A full investigation of the origins and history of supersessionism would require a considerably lengthier effort than can be given here. Yet in terms of the hypothesis that supersessionism is a singular evil that stems from some specific source, the diagnosis is that historical circumstances in which early Christian communities sought to stake out the boundaries between heresy and orthodoxy generated readings of the Gospel of John in which the text's language of temporality, replacement, stratification, and semiotic ambiguity all contributed to the interpretation that the Incarnation of Christ replaced God's covenant with Israel. The opposing construal of Logos among Christians and Jews during this time period appears to have been a significant cause of supersessionist readings of the Gospel of John. Rather than the claim: "Jews and Christians are mutually exclusive with respect to God," the claim supported by these investigations is: "Jews and Christians are mutually exclusive with respect to how early Church leaders chose to interpret Logos in the Gospel of John's language of temporality, replacement, etc." Were one to render these investigations on the nested continua graph, the effort would begin by drawing "Christians" and "Jews" as discrete markings near the center of the circle, implying discontinuity *without conditions*, or *absolute* discontinuity, and then working toward the center by drawing successively smaller circles understood as "history," "early Christian history," "heresiology in early Christian history," "interpretation of the Johannine text in heresiology in early Christian history," and

“interpretation of temporality, replacement, stratification, semiotics, and Logos in the Johannine text in heresiology in early Christian history,” inquiring with each successive move what the Christians/Jews distinction means if understood according to that interpretive circle. Were a theologian to argue for a particular Christological perspective, he or she would need to account for these aspects of the Johannine text in such a way that their norms are respected without reproducing the errant binarism of supersessionism.

Suggestions for further research

There are at least five overarching areas within which this research might be developed further: mathematics/logic, metaphysics, aesthetics, history, and theology. Regarding mathematics, it should be stressed that this is not the primary focus of the nested continua model, and that such mathematical elements as ordinal/cardinal number that have been raised are intended to assist in the model's metaphorical understanding of the qualitative relations between one's interpretive frameworks. Still, as the discipline that seeks formal patterns at their most abstract, and which has a particular relevance to diagrams, mathematics is important to this project, particularly since the logical operations of the model are intended to function as its most versatile feature. A particular area in mathematics that might be given greater attention is the model's understanding of topology, which is relevant insofar as layers of continuity are understood at successive levels of infinity, and with infinitesimals as topical singularities within continua. Peirce owed much of his topological understandings to Johann Listing (1808-1882), yet Listing's mathematical writings have generally been left behind in the wake of twentieth-century mathematical advances.⁵³⁴ Along with projective geometry and modal logic, topology is a branch of mathematics that it would be beneficial to investigate further if nested continua should hope to take its mathematical understandings beyond the point where Peirce left them. Regarding logic, it would be helpful to pursue more recent developments in iconic logic, particularly the iconic logic of relations that characterized the operations of Peirce's Existential Graphs, and which remains

⁵³⁴ Raposa, *Peirce's Philosophy of Religion*, p. 146.

relatively underdeveloped even today. Sun-Joo Shin's *The Iconic Logic of Peirce's Graphs*, from 2002, is a helpful resource to this end, as Shin's book places Peirce's logic within the currents of much twentieth-century logic, including the modal logic that had occupied Peirce in some of the last writings before his death.

As for further research in metaphysics, an important question concerns the relevance of Weiss's (and Neville's) distinction between essential and conditional features, as well as the relation between Peirce and Whitehead's respective metaphysics more broadly. As the effort to identify what has been labeled singular evil shows, it is very difficult on any metaphysics derived from Peircean continuity to posit a specific individual entity, so the issue of essential features is particularly relevant. Further energies might be devoted toward speculating as to how the essential features of some existent continuum provide an enduring basis to reflect the conditional features that stem from that continuum's placement on the graph in relation to other continua. As investigation into a singular continuum's essential features—which as qualitatively unique signify iconically—almost certainly must involve (symbolic) linguistic reference, the question of how the model's iconic signification relates specifically to language is also a vital issue, one that is even more relevant considering the centrality of language in contemporary philosophy more generally. A promising resource toward this end comes from the biosemiotic research of Andrew Robinson, who has applied Peirce's three categories in such a way as to be compatible with biological evolution. Investigating the origins of human language, Robinson argues that about 70,000 years ago humans developed linguistic forms of communication, and “the cognitive breakthrough which the co-

occurrence of symbol-mediated discourse and iconic [signification] had the capacity to generate was, in effect, that of reasoning by means of the use of diagrams.”⁵³⁵

Robinson further points out:

Human distinctiveness may have emerged, not merely through the ascent of a hierarchy of semiotic competence...but, rather, through entering what I shall refer to as the “semiotic matrix.” On this view, the ultimate threshold in human evolution was, I shall suggest, the acquisition of competence in creatively combining different kinds of sign, particularly the emergence of a capacity to combine symbols with various types of icon.⁵³⁶

Unlike arguments for human distinctiveness in language use that posit language *alone* as the pivotal feature, Robinson thus holds that it was language *in conjunction with* iconic signification through diagrams that marked the inception of our current structures of cognition. If Robinson’s thesis is plausible—and I believe it is—then the combination of iconic and symbolic signification is encouraging for the ability to explore the relationship between textual and diagrammatic signification on the nested continua model. This is particularly relevant for the applications of nested continua toward issues that Ochs’s textual reasoning addresses, the compatibility with which was the aim of Chapter Two’s discussion of binarism in historiography/postmodern philosophy and Chapter Four’s discussion of supersessionism.

Another area that might be developed further is the aesthetic dimension of the nested continua model, particularly considering that aesthetics is the normative science that Peirce held to be the most intimately bound up with iconic signification. Aesthetic inquiry might be carried further through nested continua to observe

⁵³⁵ Robinson, *God and the World of Signs*, p. 156.

⁵³⁶ *Ibid.* p. 150.

theologically relevant points in works of art whose meaning might be interrogated through the terminology of the model. For example, one could very well conduct a study on the *theosemiotic* of John Keats's *Ode on a Grecian Urn*, whose enigmatic lines ("Beauty is truth, truth beauty, that is all/ Ye know on earth, and all ye need to know") are highly congenial to Peirce's understandings of musement and abduction. For Keats's musings on the Grecian urn enact a play of mind in which the mind's disparate perceptions in preceding stanzas become unified through the poem's conclusion, a conclusion that represents not so much an injunction as an invitation to conceive a vague, yet vital notion of God's presence in the world. Other promising examples can be found in the characters' experiences of revelation as found in the works of Flannery O'Connor and Marcel Proust. O'Connor's short stories, for example, provide ample demonstrations of revelation through the irritation of doubt, whereas Proust's *In Search of Lost Time* contains one of literature's most famous examples of musement in the narrators remembrance of his childhood upon encountering the taste of a cookie soaked with tea:

No sooner had the warm liquid mixed with the crumbs touched my palate than a shudder ran through me and I stopped, intent upon the extraordinary thing that was happening to me. An exquisite pleasure had invaded my senses, something isolated, detached, with no suggestion of its origin. And at once the vicissitudes of life had become indifferent to me, its disasters innocuous, its brevity illusory—this new sensation having had on me the effect which love has of filling me with a precious essence; or rather this essence was not in me it *was* me. I had ceased now to feel mediocre, contingent, mortal.⁵³⁷

There is a sense in which aesthetics, as that which is good in itself, is immune to interpretation from an abstract model of theology and philosophy. On the other

⁵³⁷ Proust, *Swann's Way*, p. 48.

hand, though the *experience* of the aesthetic may be irreducible, the subsequent *communication* of it is not, and in this sense nested continua provides an effective vocabulary through which to locate the appropriate categories of description. A certain strain of twentieth century continental philosophy provides a fruitful conversation partner in this endeavor—e.g. Hans Georg Gadamer’s *The Relevance of the Beautiful*⁵³⁸, from 1977. or Gilles Deleuze’s *A Thousand Plateaus*⁵³⁹, from 1980—which also combines semiotic analysis with aesthetics, yet draws from the tradition initiated by Ferdinand de Saussure rather than Peirce.

Regarding history, which is the fourth suggested area for further research, the most effective way to proceed would be to undertake a historical research project that is informed by the nested continua model. Aside from Marcuse’s understanding of reception history—discussed in Chapter Two—a particular type of historical inquiry that is congenial to nested continua is what William Whewell (1794-1866) called *colligation*, in which identifying patterns involves “seeing individual events as forming a conceptual whole, such as the elliptical path of a planet, the growth of freedom, or the waves of fluctuation in prices.”⁵⁴⁰ For example, colligation regarding the history of circles in mathematics, literature, and philosophy since the time of Pythagoras could prove worthwhile, which would have the added benefit of grounding nested continua within a long-held tradition of

⁵³⁸ Gadamer, Hans Georg. *The Relevance of the Beautiful and Other Essays*. Cambridge: Cambridge University Press, 1986.

⁵³⁹ Deleuze, Gilles. *A Thousand Plateaus*. Minneapolis, MN: University of Minnesota Press, 1987.

⁵⁴⁰ McCollagh, C. Behan. “Colligation.” *A Companion to the Philosophy of History and Historiography*. Ed. Aviezer Tucker. Oxford: Blackwell, 2011, p. 160.

metaphorical investigation on circles. There are three further historical research projects that look promising. The first would be a reconstruction of the pragmatic tradition in the years since Peirce's death. In spite of this topic having been treated by Cornel West in his *The American Evasion of Philosophy* and Robert Brandom in his *Perspectives on Pragmatism: Classical, Recent, and Contemporary* (with less direct analysis of Peirce in each case), a colligatory analysis through nested continua might discern trajectories within the tradition and perhaps point toward further applications.⁵⁴¹ A second project along these lines would be to specify within the pragmatic tradition the trajectories of Peircean religious studies, of which Ochs and Neville are but two figures among many. Josiah Royce, Charles Hartshorne, Paul Weiss, John E. Smith, Michael Raposa, and Robert Corrington, among others, would be discussed, and the nested continua model could assist in identifying continuities of influence (and discontinuities) among the leading figures. A third historical project would be to write a book-length biography of Peirce, which, Joseph Brent's work notwithstanding, has not been accomplished as effectively as it could be. Considering the growing body of literature on Peirce, a new biography of his life would be a valuable contribution to Peirce scholarship.

Regarding theology, there are two general directions in which the nested continua model might be taken further, reflecting its double function as both a metaphorical armature upon which to hang certain theologically laden claims and as an identity-shaped method of reparative reasoning. In its metaphysics, the nested

⁵⁴¹ West, Cornel. *The American Evasion of Philosophy: A Genealogy of Pragmatism*. Madison, WI: University of Wisconsin Press, 1989.

continua model, like Peirce's own work, suggests certain theologically relevant points, which could perhaps be of use to theologians wishing to find a philosophical vocabulary through which to understand both doctrinal and practical aspects of faith. For example, in the practices of the liturgy, participants signify the divine life by enacting it in the sacraments, an exercise in anagogy that refers the existential life of Secondness forward to the divine as ultimate logical interpretant. Excellent role models for this sort of interaction between philosophy and theology can be found in David C. Lamberth's *William James and the Metaphysics of Experience*, which diligently establishes continuities between William James's better known writings on psychology and pragmatism and his metaphysics in a way that opens onto theology, as well as Neville's *A Theology Primer*, which employs his axiology of thinking toward a succession of traditional theological categories. Also relevant as conversation partners for this sort of endeavor are Pierre Teilhard de Chardin and Wolfhart Pannenberg, two twentieth-century thinkers whose work resembles Peirce's own in their explorations of nature, time, and history, yet develops theology more overtly than did Peirce.⁵⁴² For example, Pannenberg explicitly links a philosophical understanding of history to both eschatology and ecclesiology in the following passage: "Revelation is not given as an experience of immediateness, but is still transmitted to us through the channel of history...The eschatological orientation of the congregation discloses for the first time the universal aspect of the

⁵⁴² Raposa has noted an affinity between Teilhard de Chardin and Peirce (*Peirce's Philosophy of Religion*, p. 87), and Brandon Daniel-Hughes's *The Future of Inquiry: Charles Peirce, Naturalism, and the Symbols of the Christian Eschaton* discusses both Teilhard de Chardin and Pannenberg at length. Robinson's *God and the World of Signs* should also be understood as a very thoughtful elaboration upon the relevance of Peirce's three categories to Christian apologetics, expounding upon not only Christology but also pneumatology and soteriology as well.

concept of the church by means of the perfection of history in the fate of Jesus.”⁵⁴³

Although merely hinted at in Chapter Four’s speculations upon the eschatological implications of absolute Thirdness as ultimate adjudicator of the universe, the eschatological dimension of nested continua as a gradual outward progression of circles from the absolute center toward outermost horizon would be a compelling project in conversation with Pannenberg’s theological reading of history.

The second general area of relevance of the nested continua model to theology concerns the utility of the model in distinguishing between appropriate and inappropriate contexts of reasoning in religious debates without reducing the unique theological norms of the communities involved. Analysis of such debates could be historical, as with the debate over women’s ordination in the Church of England, which came to a head in the General Synod vote in November 1992 recognizing women priests, or it could be ongoing, as with the present debate over homosexuality in the United Methodist Church. The logical form of analysis is the same in both contexts, involving the identification of problematic sources of tension among the arguments of a given debate by showing how errant rules of reasoning within those arguments inhibit communication, conflate the theological points at hand and engender lingering resentments on both sides of an issue. The debt to Ochs in this regard is obvious, though the hope is that nested continua might be applied to a wider range of topics than Ochs’s textual reasoning, including debates in contemporary discourses of science and religion. A projective geometric hermeneutics such as nested continua could provide an excellent means of

⁵⁴³ Pannenberg, Wolfhart. *Revelation as History*. London: MacMillan, 1968, p. 177.

contextualizing some of the prevailing norms and distinctions being offered in religious and scientific claims.

An example of a relevant debate in contemporary science and religion can be found in a recent group of thinkers who have challenged moral realism—the perspective that the truth of human moral claims is real independently of what any mind or collection of finite minds might imagine them to be—on the grounds of Darwinian evolution. In his popular work *Darwin's Dangerous Idea*, philosopher Daniel Dennett likened Darwin's theory of evolution to a "universal acid," so potent that it "eats through just about every traditional concept, and leaves in its wake a revolutionized world-view, with most of the old landmarks still recognizable, but transformed in fundamental ways."⁵⁴⁴ A number of contemporary philosophers, including Michael Ruse,⁵⁴⁵ Paul Griffiths, John Wilkins,⁵⁴⁶ Sharon Street,⁵⁴⁷ and Richard Joyce,⁵⁴⁸ have taken this skeptical challenge very seriously. These thinkers claim that Darwinian evolution rules out knowledge of objective facts about morality, which (if such facts exist) would seem to lack the sort of connection with reproductive fitness that is demanded by their criterion for truth-tracking. This quite seriously restricts our noetic access to the world, and appears to have the

⁵⁴⁴ Dennett, Daniel. *Darwin's Dangerous Idea: Evolution and the Meanings of Life*. Harmondsworth: Penguin, 1996, p. 63.

⁵⁴⁵ Ruse, Michael. "Is Darwinian Metaethics Possible (and If It Is, Is It Well Taken?)." In *Evolutionary Ethics and Contemporary Biology*, edited by Giovanni Boniolo and Gabriele De Anna. Cambridge: Cambridge University Press, 2006.

⁵⁴⁶ Griffiths, Paul E., and John S. Wilkins. "When Do Evolutionary Explanations of Belief Debunk Belief?" In *Darwin in the 21st Century: Nature, Humanity, and God*, edited by P. R. Sloan. South Bend, IN: Notre Dame University Press, 2010.

⁵⁴⁷ Street, Sharon. "A Darwinian Dilemma for Realist Theories of Value." *Philosophical Studies*.127, 1, 2006.

⁵⁴⁸ Joyce, Richard. *The Evolution of Morality*. London: MIT Press, 2006.

consequence that objective moral facts are unknowable. Yet the nested continua model can help address this challenge. Through its understanding of abductive reasoning, the model allows that the truth of an assertion is inextricably bound up with that which it has the objectively real possibility to explain. Through its inclusion in the category of Firstness as objective chance, the model allows for the perception of novel concepts that, while not necessarily true, have the real possibility of being true in such a way that causal connections to evolutionary ancestors need not be involved. Through its continuity of mind and matter as indistinct with respect to the living, inferential metaboly of symbols that comprise the universe, the model also puts the human in the middle of an evolutionary natural world without compromising the ability to make choices on the basis of real moral knowledge.

The sense in which the nested continua model might address problems among debates that are relevant to religion is perhaps its most promising area for further research. By signifying iconically through circles and markings whose vagueness is specified by whomever interprets the graph, as well as operating by way of a relatively small number of rules whose efficacy lies open to all, the nested continua model is intended to be open to all vocabularies of inquiry, from the aesthetic to the scientific to the theological. Should some problem or situation arise that *cannot* be rendered upon the graph in some way, the hope is that this will provide an occasion for revising the model's logical rules or metaphysical assumptions without its fundamental structure having to be abandoned. Following Peirce, the aim is to never have to block the way of inquiry. That the model might

direct those whose interpretations are guided by it toward a horizon of concrete reasonableness is well described in the old folk song: “will the circle be unbroken/By and by Lord, by and by/There’s a better home awaiting/In the sky Lord, in the sky.”

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