

**The Pennsylvania State University**

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**THE SLOW PERCOLATION OF FORMS:  
CHARLES PEIRCE'S WRITINGS ON PLATO**

A Thesis in

Philosophy

by

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## Abstract

This dissertation examines Charles S. Peirce's writings on Plato. Peirce's lifelong reading of Plato, and especially of Plato's late dialogues in the 1890s, was influential in the development of Peirce's Pragmatism. Peirce claimed that Plato misunderstood himself and was, late in his career, developing an evolutionary, three-level metaphysics and logic that anticipated Peirce's Pragmatism.

The first half of the dissertation deals with Peirce and the history of philosophy. Chapters address the case for this study, Peirce's method of studying the history of philosophy and his use of intellectual autobiography, and Peirce's encounter with Platonism in America. A running theme throughout the dissertation is Peirce's engagement with mysticism and American Transcendentalism, and especially with Emerson, Thoreau, and Henry James, Sr. Also discussed here is Peirce's reception of stylometric analyses of the Platonic dialogues through Wincenty Lutoslawski's *Origin and Growth of Plato's Logic*. The section on stylometrics also briefly discusses Lewis Campbell and contemporary views on stylometrics in Brandwood, Thesleff, and Nails.

The second half of the dissertation examines Peirce's writings on particular Platonic dialogues and the consequences of those writings for Peirce's Pragmatism. Chapters cover the development of Peirce's metaphysics, his ethics of inquiry, etymology and the ethics of terminology, and miracles and their relation to scientific and historical research. The chapter on miracles also examines the role Plato played in Peirce's response to Hume on miracles.

Individual chapters address Peirce's writings on Plato's *Cratylus* and *Theaetetus*. The *Apology*, *Parmenides*, and *Sophist* are also discussed. Especial attention is paid to Peirce's unpublished manuscripts, as well as to his entries on "Platonic" and "Socratic" in the *Century Dictionary*, his own account of his debt to Aristotle, his intellectual autobiographies, and his manuscripts entitled "Metaphysical Axioms and Syllogisms," "A Neglected Argument for the Reality of God," "Philosophy and the Conduct of Life," "On the Logic of Drawing History from Ancient Documents," and "The Law of Mind."

Appendices include transcripts of Peirce's unpublished partial translations of Plato's *Cratylus*; a transcript of an unpublished letter from Peirce to Lady Welby on the *Theaetetus*; and a catalog of references to Plato in Peirce's manuscripts.

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## A Note on References

My references to Peirce's writings will use the following abbreviations<sup>1</sup>:

- CP*      *Collected Papers of Charles Sanders Peirce*, ed. C. Hartshorne, P. Weiss, and A. Burks (Cambridge: Harvard University Press, 1935, 1958). References are by volume and paragraph number, so *CP* 1.2 refers to volume 1, paragraph 2.
- CD*      *Century Dictionary*. References are to the 1896 edition, (NY: The Century Co.) by page number.
- EP*      *The Essential Peirce: Selected Philosophical Writings*, ed. N. Houser et al., two volumes (Bloomington: Indiana University Press, 1992 (vol. 1) and 1998 (vol. 2)). References are abbreviated as "*EP*" followed by volume and page numbers.
- HP*      *Historical Perspectives on Peirce's Logic of Science*, ed. C. Eisele, two volumes (The Hague, Mouton, 1985). References are abbreviated "*HP*" followed by page numbers. Pages 1-585 are volume I, pages 586-1131 are volume II.
- L*        This indicates a subset of *MS*. Some of the Peirce papers are letters, some by Peirce and others written to him. These are also catalogued in Robin, and microfilmed by the Harvard University Library, *ibid*. L259.1 indicates Robin's catalogue letter number 259, page 1.
- MS*      *The Charles S. Peirce Papers* microfilm edition (Harvard University Library, Photographic Service, 1966). References employ the numbering system for manuscripts (*MS*#) developed by R. S. Robin in his *Annotated Catalogue of the Papers of Charles S. Peirce* (Amherst: University of Massachusetts Press, 1967), as supplemented by Robin in "The Peirce Papers: A Supplementary Catalogue," *Transactions of the Charles S. Peirce Society* 7 (1971): 37-57. "MS 434.30" indicates Robin's catalogue manuscript number 434, page 30.
- N*        *Charles S. Peirce: Contributions to The Nation*, ed. K. L. Ketner and J. E. Cook, three volumes plus index volume (Lubbock: Texas Tech University Press, 1975-79). References are abbreviated as "*N*" followed by volume and page numbers.
- PW*      *Semiotic and Significts: The Correspondence between Charles S. Peirce and Victoria Lady Welby*, ed. C. Hardwick (Bloomington: Indiana University Press, 1977). References are abbreviated as "*PW*" followed by page numbers.
- RLT*    *Reasoning and the Logic of Things: The Cambridge Conference Lectures of 1898*. Kenneth Laine Ketner, Ed. (Cambridge: Harvard University Press, 1992.)
- W*        *Writings of Charles S. Peirce: A Chronological Edition*, ed. M. Fisch et al., six volumes now completed (Bloomington: Indiana University Press, 1982-). References are abbreviated as "*W*," followed by volume and page numbers.

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<sup>1</sup> I am using Michael Raposa's similar "note on references" as a guide here, and have copied his text liberally. See Raposa, Michael, *Peirce's Philosophy of Religion*. Bloomington: Indiana University Press, 1989. pp. ix-x.

## **Introduction**

### **Précis of the Dissertation**

#### ***Theme***

This dissertation examines Charles S. Peirce's writings on Plato. In the first part of the dissertation I pursue the historical development of Peirce's thought on Plato. In this context I identify Peirce's evolving method of historical inquiry. In the second part, I discuss several of Peirce's unpublished manuscripts and their significance for the development of Peirce's thought. Here I apply the method discovered in the first half of the dissertation in order to discuss Peirce's ethics of inquiry and the development of his metaphysics in the context of his study of Plato's dialogues.

#### ***Context of the study***

Throughout his adult life, Peirce wrote extensively on Plato. His writings on Plato appear in many contexts, including investigations into the life of Plato, studies of Plato's method of investigation, translations of Plato's dialogues, and detailed notes concerning the stylistic tropes Plato employed. Some of Peirce's writings look at Plato as a logician and attempt to trace Plato's arguments syllogistically. Others consider the value of Plato's metaphysics for science or for religion. Many of them attempt to chronologize Plato's dialogues in order to discover the historical development of Plato's thought.

Peirce's reading of Plato was not without consequences for Peirce's own thought. Although for much of his life Peirce would have resisted calling himself a Platonist or a

follower of Plato, Plato was a rich resource for stimulating Peirce's own thought. Peirce tried his hand at writing Platonic dialogues, and references to Plato often appear in those of Peirce's writings where he is attempting to work through some newly discovered problem. Peirce's early reading of Plato seems to have helped him to develop his early formulation of pragmatism. His writings in his middle years are peppered with significant references to Plato. Late in his career, Peirce's study of Plato reached its greatest intensity. In the last two decades of his life, Peirce looked to Plato for a model of revising his own metaphysics and method of inquiry. During these later years it became apparent to Peirce that Plato misunderstood himself but was beginning, in his later dialogues, to discover this self-misunderstanding and subsequently to revise his metaphysics.

The title of this dissertation, "The Slow Percolation of Forms," is taken from Peirce's Cambridge Conference lecture of 1898, "Philosophy and the Conduct of Life." In a letter Peirce sent to William James on the 26<sup>th</sup> of December 1897, just two months before he gave this lecture, Peirce wrote of it that "there is nothing in it not essentially in Plato."<sup>2</sup> The lecture marked an important turn in Peirce's thought, towards Plato as a model of the method and ethics of inquiry. All human sciences, from the humane study of history to the study of pure mathematics, are related, Peirce claimed. All of them, when pursued correctly, converge on the same point. All of them, that is, make us acquainted with "one great cosmos of forms, a universe of potential being."<sup>3</sup> He is careful to point out that these forms are not necessarily identical with what are commonly taken to be Plato's Forms, yet they are not wholly distinct. Peirce concluded that lecture on an

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<sup>2</sup> *RLT*, 33.

<sup>3</sup> *EP II*, 40.



optimistic note, evincing the promise he perceived in his view of inquiry. If we study correctly, we stand to reap great rewards from doing so. He concluded,

The soul's deeper parts can only be reached through its surface. In this way *the eternal forms*, that mathematics and philosophy and all the other sciences make us acquainted with, will *by slow percolation* gradually reach the very core of one's being; and will come to influence our lives; and this they will do, not because they involve truths of merely vital importance, but because they are ideal and eternal verities.<sup>4</sup>

This dissertation aims to explain both this historical turn towards Plato and its significance for the development of Peirce's thought.

### ***A Theoretical Problem: Why Does the History of Philosophy Matter?***

It could be argued that such a study of the development of Peirce's thought is unimportant. Why should it matter whether we discover the historical development of Peirce's—or of anyone's—thought? If we attempt such an inquiry, how can we avoid reducing the value and importance of someone's thought to its origins? Furthermore, is it not enough to have at hand Peirce's mature conclusions accompanied by whatever reasonings led him there?

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<sup>4</sup> *EP II*, 41, italics mine.

The latter question is made partly irrelevant in Peirce studies since his writings have still not been wholly chronologized. Despite the importance of Plato for Peirce, very little study has been devoted to this aspect of Peirce's intellectual career. Many of his manuscripts are undated, and they have not always been well cared for by their custodians. If we are to know Peirce's final thoughts on Plato, we must know which of his manuscripts represent them. This entails, to some degree, a study of the manuscripts for internal evidence that can be used to date them.

The questions still remain: Is there value in the study of the history of philosophy? And can it be done with integrity?

### ***A Peircean Reply***

Peirce replies to this problem in his approach to the history of philosophy. Metaphysics, aesthetics, ethics, and logic are ultimately inseparable from one another. Our varied thoughts and categories are not discrete but run together continuously. The truth we seek in rational inquiry is not wholly remote from us, located in the inaccessible thing in itself or some realm of Ideas or Forms. If it were, then it would always be inaccessible, it would have no practical value, and could have no purchase on our lives. It would cease to be an object of inquiry. For the same reason, it cannot be merely a name stitched together from scraps of the fabric of our fancy. Such a name might have some value for action, but could only serve as a means of inquiry into our own psychology. In the one case inquiry reaches too far out to be of use; in the other case, inquiry can only reach inwards and the world ceases to matter. Peirce locates real truth in the world, separated from us only by time and productive habits of investigation. The

world reveals itself to the diligent<sup>5</sup> community of inquiry, and the truth is unveiled as that which would-be known at the end of all investigation. Philosophical investigation, according to Peirce, always contains an element of historical inquiry.

To be diligent in inquiry means to act according to an ethic of inquiry. Peirce has much to say about this. For Peirce, inquiry must begin where there is a real irritation of doubt, a real suspicion that is being pursued. Mere “paper” inquiries do not count. If the doubt is real, then we must allow for a real solution. This involves a fallibilistic commitment to discovering the truth and not merely to finding what we wish to find. Science cannot be the pursuit of a solitary inquirer, but must be the object of a whole community. This community is appropriately extended in time to those who preceded us and to those who will follow us. This means that we must read history (to know what has been discovered in the past and how it was discovered) and we must publish our results (thereby including future inquirers into our community). Furthermore, this means that education cannot be mere instruction and imparting of information but must mean study, including a study of history. Mere impartation of information presumes that the truth has been discovered, whereas the development of a community of inquiry presumes that there is always more to learn and that more inquirers will be needed. In the development of this ethic of inquiry it becomes clear that truth becomes a matter not of dogma but of history. It is what would be revealed in the future to a community that extends into the past. Our grasping of it is both real and gradual, but it can be lost or mishandled. Beginning with real doubt and supposing that there is real truth to be discovered relieves the inquirer of the privilege of dogma and of the responsibility of defending the truth

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<sup>5</sup> A word which was once synonymous with “loving.” Peirce might say “agapic.”

from all challengers. Inquiry must not be biased toward definite practical results, but must allow the truth to be revealed regardless of its immediate practical value. It is also evident from this that Peirce believes that self-control is required for the inquirer. Peirce's model, then, is not irresistible dialectic but self-controlled dialogue. The researcher must acquire the habit of self-control and apply it in sustained inquiry.

### ***Plato's Role in Peirce's Solution***

This ethic of inquiry that Peirce develops owes significant debts to his study of Plato. Obviously, Plato's investigations also begin with a real doubt, presume that truth can be discovered in inquiry, develop in the dialogue of a community of inquirers, and insist on consistency and self-control on the part of the investigators. But Peirce's debt to Plato goes deeper than this. The arguments Peirce offers for his ethics and method of inquiry are often found in the context of his studies of Plato. Peirce translated portions of the *Cratylus* and *Apology* apparently as investigations into Plato's conception of science. It is in the context of studying Plato's self-revision in his dialogues *Parmenides* and *Sophist* that Peirce reformulates his own metaphysics. Perhaps most importantly, Peirce revisited the *Theaetetus* repeatedly throughout his life, and his own method of inquiry developed in parallel with his understanding of Plato's method.

The study of Peirce's thought, then, is an exercise in extending the community of inquiry, beginning with Peirce and reaching back through the Platonisms that informed his intellectual development to Plato himself. To study Peirce's reading of Plato is to attend to Peirce as an inquirer into human knowledge, and to reach through Peirce to one of his most important interlocutors.

My principal aims, then, are to discover Peirce's method of inquiry into the history of philosophy and then apply it to Peirce. A secondary consequence of this study will be a partial remediation of the lack of an adequate catalogue to Peirce's thought. A more detailed catalogue of Peirce's writings on Plato than currently exists in print appears as an appendix to this dissertation.

### **Outline of the Dissertation**

This dissertation is divided into two sections. The first section, chapters one through three, deals with the historical development of Peirce's thought in its relation to Platonism. The second section, chapters four through six, looks at some of the key unpublished texts pertaining to Peirce's study of Plato.

In the first section I look at Peirce's reading of Plato as an historical study. In chapter one I make the case for this study on three levels: first, the manuscripts are still in need of organization and a reliable catalogue. Peirce's writings on Plato remain largely unedited and have never been catalogued. Such a catalogue is a long way from being produced, and so this dissertation (and especially the appendix) will constitute a contribution towards this end. Second, Peirce's writings on Plato are largely unpublished and unresearched, and it has been argued that if we are to understand Peirce, we must understand his historical and intellectual context. Third, it is plain that Peirce's reading of Plato was important in the development of his thought, yet it cannot easily be seen from reading scattered writings how important that influence was or in what fashion it assisted Peirce in the development of his categories, cosmology, metaphysics, and ethics. In three examples I show how Peirce's reading of Plato was both subtle and important for

the development of his thought. From this it is plain that a clearer picture of Peirce's reading of Plato is needed.

If this is so, then a method of drawing the history of Peirce's engagement with Plato is needed. In chapter two I look at Peirce's writings on the history of philosophy to illustrate the method that Peirce developed. For Peirce, it was important to study the development of his own thought, and he frequently detailed this development in his writings. In fact, Peirce emphasized the importance of studying all philosophy in its development, as is seen from his earliest writings but especially after studying the logic of Philodemus with his graduate student Allan Marquand at Johns Hopkins. I draw from Peirce's writings the regulative principles that the history of philosophy is the most important of the humane sciences; that it cannot be done wholly theoretically, but must attend to actual development of thought; that it has value in and of itself if it is practiced in an unbiased fashion and without the expectation of gain; and that thought develops.

Chapter three begins the application of Peirce's method of drawing the history of philosophy to Peirce's thought. In it I give an historical account of Peirce's engagement with Plato. Starting with clues from Peirce's intellectual autobiography I focus chiefly on Peirce's encounter with Platonism through two sources: the Transcendentalism of Emerson in Peirce's youth and Peirce's discovery of Wincenty Lutoslawski's *The Origin and Growth of Plato's Logic* later in life. Through Emerson and the Transcendentalists Peirce received Plato as a mystic and a poet more than as a logician. Plato's and Emerson's mysticism nevertheless became important sources for Peirce's thinking about the logic of abduction, scientific discovery, and creative growth. Through Lutoslawski Peirce came to take Plato seriously as a logician and as a scientist. As a scientist, Plato's

chief merits are his fallibilistic self-correcting method of inquiry, his focus on dialogue and community, and his metaphysical realism. In all of these Peirce found anticipations of Pragmatism and a model for correcting his own cosmological speculations.

The second section looks at several of Peirce's key writings on Plato in order to examine Peirce's philosophical engagement with Plato. Chapter four discusses two partial translations of the beginning of the *Cratylus* that Peirce made at different times. Each translation is brief, the longer of the two being only six pages long. In neither one does Peirce explain why he has made the translation. One of these translations probably assisted Peirce with his stylometric analyses of the dialogues. Each translation also contains considerable commentary concerning the correct method of thinking about the development of language. Both translations appear to be related both to Peirce's various dictionary jobs and to his broader semeiotic. In neither case does Peirce translate or write enough to show whether the dialogue itself was helpful for his thinking, but it is plain that the question of whether verbal signs signify naturally or conventionally was an important one for him. Although Peirce writes very little about this dialogue, he considers this dialogue to be an important dialogue because it is more scientific than all that precede it. Its "scientific" nature is probably based on its communal investigation (as opposed to solitary investigation), its attempt to find the meanings of words in their historical development, its fallibilism and experimentalism, and its turn away from the purer metaphysics of the earlier dialogues to the practical question of semeiotic. Peirce explains in one commentary on the *Cratylus* that it is a "palimpsest." On the surface it is concerned with semiotics, but at a deeper level its concern is with metaphysics. Through

an examination of these translations and commentaries I discuss the relation of semiotics to metaphysics in Peirce's thought.

Chapter five briefly considers Peirce's scattered writings on the *Parmenides* and the *Sophist*, and then turns to consider Plato's *Theâetetus*. Peirce considered these to be among Plato's most important dialogues. He wrote sparsely concerning them, but what he wrote indicates that he drew significant lessons from them. One lesson is that Plato's thought developed. This model of fallibilism was helpful to Peirce, as was Peirce's discovery that Plato's self-criticism concerning his Forms was beginning to lead from a two-level to a three-level metaphysics. This discovery came at a crucial time for the development of Peirce's categories, especially his category of firstness. Plato's forms had attempted to be both sources, origins and possibilities, on the one hand, and laws, symbols, and generalities, on the other hand. The *Parmenides* explodes this problem, and the *Sophist* begins to address it by thinking of forms in terms of numbers. In the *Theâetetus* Peirce discovered "Plato's greatest contribution to thought," i.e. the idea that all thought is in dialogue. This, combined with Peirce's idea that all dialogue is in signs, forms the basis of Peirce's thought, and of his ethics of inquiry. I also look at Oehler's and Schiller's writings on the *Theâetetus* to show how Plato, Peirce, and other pragmatists deal with the question of Protagorean relativism as a pragmatic question.

The final chapter attempts to show in broader perspective how Peirce's reading of Plato influenced his thought. In his later years his writings are filled with references to Plato. One set of documents from roughly 1897-1903 draws a connection between Plato, Hume, miracles, and the logic of drawing history from ancient documents. Peirce wrote that "though synechism is not a religion, but, on the contrary, is a purely scientific



philosophy, yet should it become generally accepted, as I confidently anticipate, it may play a part in the onement of religion and Science.”<sup>6</sup> Looking at Peirce’s writings on miracles, I show how Plato helped Peirce attempt this “onement.”

I must make one final note about Peirce’s texts. Peirce wrote that Plato’s texts are “palimpsests,” meaning that they frequently may be read in more than one way, and have more than one purpose. This is also true of Peirce’s texts. Only very infrequently did Peirce write texts solely about Plato. Usually, his texts reach out in many directions at once. In this dissertation I will frequently return to three such texts: his 1898 lecture “Philosophy and the Conduct of Life,” his *Monist* essay, “The Law of Mind,” and a chapter of his unpublished treatise on *Minute Logic*, (*MS 434*) in which he gives his longest comments on Plato’s texts. Each of these texts constitutes one of Peirce’s important commentaries on Plato or Platonism, but each one also has other aims, and so will wind up coming into this dissertation in multiple contexts.

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<sup>6</sup> *CP* 7.758.

## Chapter 1: The Problem of Peirce and Plato: The need for this study

As to Plato, unless we are content to treat the only complete collection of the works of any Greek philosopher that we possess as a mere repertory of gems of thought, as most readers are content to do; but wish to view them as they are so superlatively worthy of being viewed as the record of the entire development of thought of a great thinker, then everything depends upon the chronology of the dialogues.<sup>7</sup>

Charles S. Peirce, c. 1898

Our survey of the range of Peirce's recognized relevance is sufficient evidence that his writings, both those he published and those he left unpublished, are a "repertory of gems of thought." But suppose we were now to try the hypothesis that they are also "worthy of being viewed as the record of the entire development of thought of a great thinker," and the further hypothesis that much, if not everything, depends upon their chronology.<sup>8</sup>

Max Fisch, 1983

### Introduction

In this chapter I will outline the problems that any inquiry into Peirce's study of Plato faces, and I will argue that Plato played a greater role in the development of Peirce's thought than has been commonly recognized. On the rare occasions that Peirce commentators mention Peirce's study of Plato or his Platonism, they usually commit one

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<sup>7</sup> MS 434.

<sup>8</sup> Max Fisch, "The Range of Peirce's Relevance," in *Peirce, Semeiotic and Pragmatism*, Bloomington: Indiana University Press, 1986. p. 443.

of the following errors: they underestimate the importance and scope of Peirce's study of Plato, as Max Fisch occasionally does;<sup>9</sup> they claim, as Murray Murphey does, that Peirce's Platonism was a facet of his earlier career that has only a vestigial numerical survival in Peirce's later years;<sup>10</sup> or they claim that Peirce's interest in Plato was a development chiefly of his late career, as Joseph Esposito does.<sup>11</sup> The fact that some think his study is only an early study, while some think it is only a later interest, is instructive, and indicates that there is evidence of a lifelong interest in Plato. Indeed, several important elements of his later thought can be shown to have grown out of his very early dialogue with Plato, a dialogue that sometimes took the character of a debate, but which was sustained throughout his life. In the beginning of this chapter I address the current state of Peirce's writings and explain the difficulties facing anyone wishing to inquire into Peirce's writings on Plato. In the last section of this chapter I examine three examples of Peirce's use of Plato to show the breadth of the importance of Plato to his thought. From this it is plain that a clearer picture of Peirce's reading of Plato, presented historically and thematically, is needed.

### **The Case for the Present Study**

Peirce's writings contain hundreds of pages of manuscripts concerning Plato.<sup>12</sup>

Some of these writings treat Plato as a teacher whose axioms Peirce catalogues. Others

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<sup>9</sup> Cf. Fisch, Max H. "Peirce's *Aristotle*: The Greek Influence in his later Philosophy." *Transactions of the Charles S. Peirce Society*. Fall, 1971; 7: 187-210. Especially p. 242 in Fisch, Max H. *Peirce, Semeiotic and Pragmatism*, Bloomington: Indiana University Press, 1986.

<sup>10</sup> Murphey, Murray. *The Development of Peirce's Philosophy*. Cambridge: Harvard University Press, 1961. Cf. p. 239: "it is only with respect to mathematics that this early Platonism is retained in Peirce's thought after 1885."

<sup>11</sup> Esposito, Joseph L. "The Development of Peirce's Categories," *Transactions of the Charles S. Peirce Society*. Winter, 1979; XV, 1:51-60.

<sup>12</sup> An appendix to this dissertation provides a complete catalogue of Peirce's references to Plato and Socrates in his published and unpublished works.

treat Plato as a metaphysician and logician with much to offer for contemporary philosophical inquiry. For instance, in his later reading of Plato, Peirce found Plato departing from the common portrayal of his metaphysics as some version of the two-level Theory of Forms. In logic, Peirce took an interest in Plato's logic of induction and made a similar discovery that Plato had begun to develop a logic of hypothetical reasoning. Still others of Peirce's writings on Plato are concerned with philological or historical researches into Plato's life and writings. In these writings, Plato is often a case study through which larger philosophical questions concerning the logical status of hypotheses, the ethics of inquiry, or the writing of history are pursued. When taken together, these writings indicate that Peirce's study of Plato was important for the development of Peirce's thought, yet so far no historical or systematic study of Peirce's reading of Plato has been written.

## **The Obstacles**

An attempt to discover what Peirce has written on Plato immediately runs into several obstacles. These include the lack of an adequate catalogue of Peirce's writings; editorial decisions to pare down Peirce's published works; the apparent lack of a consistent picture of Plato in Peirce's writings; and the long but inconsistently intense nature of Peirce's study of Plato.

### **Lack of an Adequate Catalogue**

Of these, the lack of an adequate catalogue is the greatest initial difficulty. There is currently no complete guide to Peirce's writings on Plato. The most common places to turn to for references to Peirce's writings on Plato are the *Collected Papers of Charles S.*

*Peirce* (CP) and the catalogue of Peirce's manuscripts assembled by Richard Robin in 1967.<sup>13</sup> The CP contains a very few brief references to Plato and to Plato's dialogues, giving the impression to the casual researcher that Peirce had very little to say about Plato.<sup>14</sup> Robin's catalogue does a little better, listing twenty-three manuscripts that deal with Plato or Platonic dialogues. The catalogue is by no means exhaustive, however, and lists only what Robin considered to be the major themes of each manuscript. Entries usually only mention Plato if a majority of the manuscript deals with Plato. In fact, Peirce refers to Plato and his dialogues in at least seventy-seven of his manuscripts, not just the twenty-three Robin identifies. In most cases, the omitted references to Plato are brief and of little importance, but in some cases the omissions are significant, as in MS 1161, which contains one of Peirce's translations of a fragment of the *Cratylus*. Additionally, the catalogue does not offer any hint of the contents of Peirce's correspondence, and it doesn't mention his writings for which we have no manuscripts, or any of his writings that have been discovered since Robin assembled his catalogue. As a guide to Peirce's manuscripts it is invaluable; as a guide to his writings on Plato, it leaves much to be desired. The *Theaetetus*, which Peirce considered the most important of Plato's dialogues, is not mentioned once in Robin, and appears to have been

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<sup>13</sup> There are several other catalogues that are far less comprehensive but important. These include Kenneth Laine Ketner's *A Comprehensive Bibliography of the Published Works of Charles Sanders Peirce with A Bibliography of Secondary Studies*, 2<sup>nd</sup> edition, revised, Bowling Green: Philosophy Documentation Center, 1986; Christian J. W. Kloesel, "Bibliography of Charles Peirce, 1976 through 1981," in *The Relevance of Charles Peirce*, Eugene Freeman, ed. LaSalle: The Hegeler Institute, Monist Library of Philosophy, 1983; and Wolfgang M. Ueding, "A German Supplement to the Peirce Bibliographies," *American Journal of Semiotics*, 2 (1-2) 1983. In 1978 Klaus Oehler compiled a catalogue of references to ancient philosophy in all of Peirce's unpublished writings. The catalogue has never been published. Copies are held by the Peirce Edition Project in Indianapolis, and the Institute for Studies in Pragmatism in Lubbock, TX.

<sup>14</sup> To be precise, in eight volumes of the CP, the name Plato (and its variants) occurs only 65 times, and in most cases, Plato is not the topic of the paragraphs. Compare this with 365 occurrences of the name Kant, and 273 occurrences of Aristotle, or even 75 times for Duns Scotus.

accidentally omitted from the description of *MS* 988, which lists only six of the eight dialogues that Peirce discusses there. This is probably due to an understandably hasty reading of the *MS* by Robin, since the references to the *Phaedrus* and *Theâetetus* in *MS* 988 are in a somewhat cramped hand. Occasionally, Robin attempts to summarize Peirce’s thought on Plato in a few pithy sentences, but winds up with misleading summaries. For example, *MS* 434 contains over two hundred pages on Plato. Robin gives a very brief description of some of the contents, and then attempts to sum up Peirce’s view with a final sentence in italics: “*For CSP, Plato’s strength lies in his ethics, not in his metaphysics and logic.*” This is explicitly contradicted by Peirce, however, whose actual view of Plato is closer to what he says of the *Meno*: “The *Meno*, which seems intended to give an idea of how Plato would propose to advance beyond the standpoint of Socrates in the *Protagoras*, is nevertheless *rather of logical than of ethical interest.*”<sup>15</sup> Additionally, at least two pieces by Peirce that make extensive reference to Plato are not listed by Robin. These include Peirce’s review of Henry James, Sr.’s *Secret of Swedenborg* (discussed in some detail later in this chapter) and a letter to Victoria Lady Welby on Peirce’s discovery of Plato’s logic in the *Theâetetus*. This letter does not appear in either of the published volumes of letters exchanged between Peirce and Welby.<sup>16</sup>

## Editorial Omissions

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<sup>15</sup> *MS* 434.38, emphasis mine.

<sup>16</sup> Though Hardwick does make a note of it at *PW* 187. He considered it a draft only. I have included a transcript of this letter as an appendix, and I discuss it in chapter five.

Editorial omissions have occasionally truncated Peirce's writings on Plato. Peirce's unpublished literary remains amount to more than 80,000 manuscript pages, only a small fraction of which has been published posthumously. The two-volume *Essential Peirce* (*EP*) includes one of Peirce's important essays dealing with Plato, but omits fully a third of the essay, most of which is on Plato. "On the Logic of Drawing History From Ancient Documents, Especially from Testimonies," roughly 100 manuscript pages, condenses three years of Peirce's intensive study of Plato's life, logic, and dialogues in its last thirty-five pages. It was, for Peirce, a demonstration of his method, and so in a way the essay is incomplete without this part. In the *EP*, this final third is omitted. Similarly, one of Peirce's earliest philosophical writings, an 1860 manuscript entitled "Metaphysical Axioms and Syllogisms" (*MS 988*) has been omitted entirely from the much larger *Writings of Charles S. Peirce* currently being published by the Peirce Edition Project. The unfortunate and probably unintended result of omissions like these is that researchers looking to see what Peirce wrote might be led by these authoritative editions to believe that Peirce was uninterested in Plato.

## **Peirce's Two Platos**

A third obstacle is the fact that Peirce does not always make clear in his writing how he views Plato on the whole. He has a tendency to single out some aspect of Plato's thought and either affirm it or (as is more often the case) attack it with vigor. Only a broad reading of Peirce on Plato will begin to illustrate the full picture of Peirce's regard for Plato. Even then one is faced with the challenging fact that for Peirce there are two Platos. That is, Peirce identifies in Plato's writings and in the tradition of Plato two different versions of Platonic thought. One Plato is a nominalist, is the proponent of the

Theory of Forms and its correspondent two-level metaphysics, and is enlisted as a source or apologist of egregious errors in much traditional (and dogmatic) metaphysics, mysticism, theology, and science. The other is a realist, is an evolutionary thinker, is a fallibilist (as evidenced by the final *aporias* of the “Socratic” dialogues and by his self-criticism in the *Parmenides*), shows the beginnings of a three-category metaphysics, and is a proto-pragmatist.

Inklings of this latter, proto-pragmatist Plato show up in some of Peirce’s earliest writings, and both Platos are present in many single manuscripts. Sometimes Peirce uses the names Plato and Socrates to distinguish between them. For example, in “The Fixation of Belief,” Peirce offers Plato as an example of an “a priori” thinker, one who falls short of truly pragmatic thought.<sup>17</sup> In a companion essay, “How to Make Our Ideas Clear,” Peirce suggests that the “real spirit of Socrates” is fallibilistic and pragmatic.<sup>18</sup> Here it is possible to see that “Plato” stands for some traditional versions of Platonism, as found in seminaries in the 19<sup>th</sup> century, for example. “Socrates” stands for the scientific element in Plato’s work.

Peirce is not consistent in using this distinction, however. Just a few years later, in his review of Royce’s *Religious Aspect of Philosophy*, Peirce wrote of “Socrates, (that is, [of] Plato himself)” indicating that he thought of the two men as one.<sup>19</sup> Similarly, when treating of Plato’s *Apology of Socrates* in *MS 974*, Peirce remarks that the *Apology* only purports to give details of Socrates’ life, implying that since the *Apology* is only a literary creation of Plato there is no personal distinction to be found between Plato and

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<sup>17</sup> Justus Buchler, ed., *Philosophical Writings of Peirce*. pp. 15-16.

<sup>18</sup> Buchler, *ibid.*, p. 37.

<sup>19</sup> *CP* 8.41.



Socrates in Plato's writings. In his *Century Dictionary* definition of "Socratic,"<sup>20</sup> Peirce wrote that Socrates is usually introduced into Plato's dialogues "only to give an artistic setting to Plato's own discussions," indicating that Socrates functions more or less as an ornament for Plato's thought.

In his later years, Peirce began to make more explicit reference to Plato's double role in the history of philosophy. These years marked the beginning of Peirce's attempt to retrieve and rehabilitate the true Plato. This was especially the case in his 1898 Cambridge Conference lecture, "Philosophy and the Conduct of Life," where he said,

If you ask me why I drag in the name of Plato so often in this lecture on the relation of philosophy to the conduct of life, I reply that it is because Plato, who upon many subjects is at once more in the wrong and yet more in the right than other philosophers, upon this question outdoes himself in this double *rôle*. There is no philosopher of any age who mixes poetry with philosophy with such effrontery as Plato. Is Robert Browning within a mile of doing so? As for our philosophic poets, so called, Alexander Pope, Fulke Greenville (Baron Brooke of Beauchamp Court), Sir John Davies, I am sure nobody ought to complain that they mingle too much sentiment with their philosophy. They do not err more in regard to the practicality of philosophy than the majority of prose philosophers. Plato, on the other hand, is more extravagant than anybody else in this respect. Only having committed the error of making the value and motive to philosophy consist mainly in its moral influence, he surprises the reader by balancing this error by the opposite one of making the whole end and aim of human life to

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<sup>20</sup> CD 5746, probably written in 1889.

consist in making the acquaintance of pure ideas. In saying that one of these errors counterbalances the other, I do not mean that taken together they do justice at all to those who live simple lives without at all thinking of philosophy, or that they give any just view of right conduct even for the philosopher. For undoubtedly each person ought to select some definite duty that clearly lies before him and is well within his power as the special task of his life. But what I mean is that the two propositions taken together do express a correct view of the ultimate end of philosophy and of science in general.<sup>21</sup>

In this passage Plato appears both as a sentimentalist poet and as a logician and philosopher. Plato's two errors arise out of his sentimentalism. In the passage above Peirce cites two ways in which Plato allows moral sentiment to shape his conception of the aims of philosophy. First, Plato claims that philosophy should have a practical "moral influence." Peirce likely has in mind the Platonistic doctrine that the aim of philosophy is to live the best life. Second, Plato claims that the philosopher has the sole obligation to seek knowledge of "pure ideas." It is important to note that Plato does argue for both of these ideals (throughout the "Socratic" dialogues and the *Republic*, for instance). Peirce's complaint is not merely with Plato, however, but with the version of Platonism received through Platonistic tradition. In this tradition Plato is invoked to buttress a moralizing view of philosophy, often without making room for logical demonstration of the validity of this view. The moralizing leads to dogmatism concerning the scope, methods, and objects of metaphysical speculation, all of which

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<sup>21</sup> *EP II*, 38.

winds up creating an obstacle to inquiry. In the passage above, there seems to be some conflation of the Plato of the dialogues (whom Peirce was just beginning to rediscover at the time of writing this passage) and the popularly received tradition of Platonism. This conflation is also partly due to the fact that passage is taken from a popular lecture.

The first mandate Peirce identifies in the sentimentalist Plato is problematic because it front-loads the philosophic inquiry with the charge to seek only what is morally valuable. This presupposes that the inquirer knows what value is in order to seek it, and it presupposes as well that the inquirer will recognize it when it is found. Obviously, it could be argued that Plato himself took up these very problems in his *Meno*, *Republic*, and other dialogues and found his inquiries inconclusive. However, Peirce's quibble is not with the historical Plato but with the Platonists who come after Plato, and especially those alive in Peirce's era or just before it. Hegel and Royce are often singled out by Peirce in this regard,<sup>22</sup> and Emerson might also be added to the list. Peirce's frequent fulminations against those who received their philosophic training in seminaries are evidence enough to identify another such party among the clergy and the religious moralists of Peirce's day.<sup>23</sup>

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<sup>22</sup> Cf. CP 1.40, "The critical logicians have been much affiliated to the theological seminaries. About the thinking that goes on in laboratories they have known nothing. Now the seminarists and religionists generally have at all times and places set their faces against the idea of continuous growth. That disposition of intellect is the most catholic element of religion. Religious truth having been once defined is never to be altered in the most minute particular; and theology being held as queen of the sciences, the religionists have bitterly fought by fire and tortures all great advances in the true sciences; and if there be no true continuous growth in men's ideas where else in the world should it be looked for? Thence, we find this folk setting up hard lines of demarcation, or great gulfs, contrary to all observation, between good men and bad, between the wise and foolish, between the spirit and the flesh, between all the different kinds of objects, between one quantity and the next. So shut up are they in this conception of the world that when the seminarist Hegel discovered that the universe is everywhere permeated with continuous growth (for that, and nothing else, is the "Secret of Hegel") it was supposed to be an entirely new idea, a century and a half after the differential calculus had been in working order." Also Cf. CP 4.69, 4.134, 5.382, 8.109ff

<sup>23</sup> Cf. CP 1.4, "Yet my attitude was always that of a dweller in a laboratory, eager only to learn what I did not yet know, and not that of philosophers bred in theological seminaries, whose ruling impulse is to teach

The second mandate troubled Peirce because these “pure ideas,” if they are wholly pure, are not encountered in experience, and so can have no practical purchase on our inquiries, and our inquiries can gain no foothold in them. They wind up becoming regulative ideals for inquirers without any scientific means of verification of their worthiness of this status. Such pure ideas are chimeras that cannot be known or argued for, but can only be posited as sentiments or dogmas.

How is it, then, that Peirce could argue that these two errors counterbalance? First, there is a sense in which both of these mandates, if taken in the spirit of synechism and fallibilism, are correct. If the pure ideas are taken to be, as Peirce puts it, “potential being” or “firsts” (elsewhere he adds that they can be generalities or “thirds”), and if we understand that inquiry affects belief, especially when pursued fallibilistically, then the two errors turn out to be a nearly adequate and scientific representation of philosophic inquiry. Inquiry should, in fact, presume there to be real and ideal truths. Those truths must also be accessible to the inquirer, with the caveat that possibility is real and therefore all things, including those truths, are subject to growth.

Second, when these errors are brought together as absolutes they are shown to contradict one another, and the second Plato emerges in the resultant dissonance. It is not the case that the two errors should be adopted together nor that together they spell out the right method of scientific inquiry. In the passage above, Peirce is drawing attention to the fact that when these two doctrines are placed together, it becomes apparent that they cannot be the whole truth about Plato. They contradict one another, and when one comes to see that, the historical picture of Platonism is cast into doubt. These doctrines arose

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what they hold to be infallibly true.” Also Cf. CP 1.126ff, 1.620, and *A Neglected Argument for the Reality of God*.

historically as attempts to describe what Plato was doing. Some say he was a moralist and a poet; others say he insisted on the sole importance of discovering the Ideal Forms. But if his philosophy teaches, on the one hand, that one should be only concerned with one's conduct of affairs in the *polis*, and, on the other hand, that one should be only concerned with the pursuit of abstract truth in dialogue, how can these statements be reconciled? Peirce suggested that there is more to Plato than meets the eye, and that Plato was due for a far deeper study, one that would attempt to get beyond these simplistic versions of Plato. In 1902 Peirce wrote,

As to Plato, unless we are content to treat the only complete collection of the works of any Greek philosopher that we possess as a mere repertory of gems of thought, as most readers are content to do; but wish to view them as they are so superlatively worthy of being viewed as the record of the entire development of thought of a great thinker, then everything depends upon the chronology of the dialogues...It is necessary that an entirely new study of Plato's philosophy should be founded upon that view of the chronology. I will endeavor briefly to do this for the single point of what is ultimately good.<sup>24</sup>

Peirce's plan involved the organization of Plato's writings so that his thought could be seen in its development, not merely as "gems of thought." The chronology of Plato's dialogues is a disputed question, since the internal chronology (i.e. the chronology of the stories that drive the dialogues) does not necessarily match the purported order in which

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<sup>24</sup> MS 434.33f.

Plato wrote them.<sup>25</sup> An interesting parallel can be drawn here between Peirce and Plato. The history of Peirce's writings on Plato similarly needs to be told. Until the development of Peirce's thought on Plato comes to light, the presence of Plato in Peirce's better-known works must remain poorly understood. Peirce's regard for Plato as logician and metaphysician plainly grew in the latter third of Peirce's career, but if his writings on Plato are not properly chronologized, Peirce's esteem will appear to fluctuate. Worse still, his subtle appreciation for Plato's thought, shown in his later works, will be easily overlooked for the more strident denunciations of the same aspects of Plato's thought earlier in his career, before he had devoted significant time of study to Plato.

### **Peirce's Uneven Study of Plato**

This brings us to the fourth obstacle, further complicating the problem of sorting out Peirce's reading of Plato. This is the fact that this study lasted his whole life but was uneven in intensity. Peirce was always attracted to the scientific and logical Plato but often was repelled by the dogmatic and nominalistic Plato. In his early years and his very later years he devoted significant time to reading Plato. In the middle years, roughly from the early 1870s through the early 1890s, Peirce's writings show little mention of Plato as a philosopher, but Peirce did read Plato in the 1880s in his researches in ancient history of science, and in order to prepare entries for dictionaries. Peirce read Plato throughout his life, but he often returned to Plato with different aims. Of especial importance is the fact that when Peirce read Plato later in life, he did so in Greek, whereas earlier he had chiefly read Plato in English. When Peirce began to distrust

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<sup>25</sup> I will discuss the current state of scholarship concerning the chronology of the dialogues, as well as Peirce's, Lutoslawski's, and Campbell's 19<sup>th</sup>-century researches, in chapter 3.

Plato's translators, he began to read Plato in Greek. When he did so, he began to take Plato's writing much more seriously, largely because he began to notice both a technical vocabulary and a corresponding interest in logic in Plato.

Peirce seems to have returned to Plato in his later years in order to work out problems in his own thought, including problems arising from his attempt to develop his categories<sup>26</sup> and correlated problems of how to understand history, metaphysics, and scientific inquiry. Peirce's study of Plato as a figure in history was the laboratory in which Peirce, in part, worked out his understanding of how historical research should progress. At the same time, Peirce's reading of Plato's writings led him into a dialogue with Plato and to a new understanding of Plato's metaphysics. This was helpful to Peirce in formulating his own metaphysics, and it contributed to Peirce's logic of history and to his ethics of inquiry, shaping the way he read Plato's dialogues. Just as Peirce's ethics and his metaphysics shape one another, so they shape the way he conducts his historical inquiries; and the historical inquiries in turn shape Peirce's ethics and metaphysics.

### **Scarce Scholarly Work on Peirce and Plato**

The fact that Peirce wrote about Plato in so many contexts makes it all the more difficult to say exactly what significance to attach to references to Plato in his various works, until those works can be placed in their historical context. Peirce's continual returns to Plato show the importance of understanding his reading of Plato if we are to understand Peirce's thought. This point is underscored by several Peirce commentators.

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<sup>26</sup> On this, see Joseph Esposito's "The Development of Peirce's Categories," *Transactions of the Charles S. Peirce Society*. Winter, 1979; XV, 1:51-60; and Esposito's "Peirce and the Philosophy of History," *Transactions of the Charles S. Peirce Society*. Spring, 1983; XIX: 155-166..

Writing in 1971, Max Fisch commented that “the revisions of his [Peirce’s] philosophy during his Arisbe period<sup>27</sup> and his approaches toward completing it, were prompted and aided by study of Aristotle, Epicurus and Philodemus, Plato, and the earlier cosmologists, in that order of importance, and in ways of which little or no account has so far been taken.”<sup>28</sup> In my opinion Fisch is mistaken about the place Plato should occupy in this list. I would place Plato just after Aristotle and before Epicurus and Philodemus. Peirce’s study of Philodemus showed him that modern commentators were often mistaken about the ancients and that the ancients were often more advanced in their logic than Peirce had presumed. The importance of Epicurus is largely due to his model of unanticipated action in the “swerve” of atoms, which became “a physical paradigm of Peirce’s category of Firstness.”<sup>29</sup> Both Epicurus and Philodemus were important for Peirce, and both spurred his return to the ancients. Peirce wrote in 1894 that the study of ancient atomism was one of his “pets.”<sup>30</sup> But once he began his study of Plato, it proved to be both broader and more enduring in its importance for Peirce. Late in life, when he wrote about the philosophers that had most influenced him, he gave the atomists short shrift, barely mentioning Epicurus in passing, but dwelling on the importance of Plato.

Fisch explains his own mistake, however, by pointing out that these thinkers were important for Peirce “in ways of which little or no account has so far been taken.”<sup>31</sup>

Fisch faced the same obstacles I have just outlined above, and especially the lack of a monograph or catalogue of Peirce’s writings on Plato. This remains largely unchanged

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<sup>27</sup> Fisch considers the years 1887-1914 Peirce’s “Arisbe Period,” named after his home in Milford, PA where Peirce resided during these last three decades of his life.

<sup>28</sup> Fisch, Max H. “Peirce’s *Arisbe*: The Greek Influence in his later Philosophy.” Fisch, Max H. in *Peirce, Semeiotic and Pragmatism*, Bloomington: Indiana University Press, 1986; (242).

<sup>29</sup> Fisch, *op. cit.*, 231.

<sup>30</sup> MS 1604.

<sup>31</sup> Fisch, *op. cit.*, 242.



since Fisch wrote in 1971. Instead, a growing number of articles and books have hinted at a strong relation between Peirce and Plato without developing that relation.

Both J. H. Muirhead and James Feibleman consider Peirce to be an heir to Platonism, albeit in different ways. Muirhead claimed that Peirce “was essentially an idealist in the Platonic tradition and that his philosophical affinities were with Royce rather than with James and Dewey.”<sup>32</sup> Muirhead wrote before even the *Collected Papers* were published, and so he based his view on a very limited set of Peirce’s papers. Muirhead sees Peirce’s rejection of materialism not so much as an affirmation of realism as of idealism.<sup>33</sup> Feibleman and Fisch both argue (correctly) that Peirce’s affinity with Plato can be grounded more deeply by attention to what Peirce has to say about his realism. Feibleman devotes a chapter in his *An Introduction to Peirce’s Philosophy*<sup>34</sup> to considering “realism from Plato to Peirce.” Plato’s realism vacillated between moderate realism, marked by “the equal reality of the ideas and of actuality,” and extreme realism, “which is predicated upon the superior reality of the ideas,” and in which “mind is the cause of all things.”<sup>35</sup> Extreme realism winds up being much closer to nominalism (“the superior reality of actuality”),<sup>36</sup> since it ultimately assigns reality only to mind. According to Feibleman, extreme realism predominated in European thought for the first millennium of Christianity, and then was slowly replaced by nominalism. During this latter time, a handful of thinkers preserved Plato’s moderate realism, especially Duns

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<sup>32</sup> Fisch, Max H. “Peirce’s Place in American Thought,” in *Peirce, Semeiotic and Pragmatism*, Bloomington: Indiana University Press, 1986. p. 305.

<sup>33</sup> Muirhead, J. H. *The Platonic Tradition in Anglo-Saxon Philosophy*. London: George Allen & Unwin 1931 (reprint: 1965); (especially pages 324-346, on Peirce and Platonism.)

<sup>34</sup> Feibleman, James, *An Introduction to Peirce’s Philosophy*. New York: Harper & Brothers, 1946. (445-463).

<sup>35</sup> Feibleman, *op. cit.*, 446-7.

<sup>36</sup> Feibleman, *op. cit.*, 447.

Scotus and Reid. Peirce, then, is heir to and embraced this moderate Platonic realism. Feibleman's chapter is helpful in providing an historical context to Peirce's Platonistic heritage<sup>37</sup> but, like Muirhead, his argument is based mostly on drawing a comparison between Peirce and what Feibleman identifies as a Platonistic strain in the history of thought. The chapter winds up saying very little about Peirce's thought except by way of these comparisons.

Many other essays probe a little more deeply into the relationship between Peirce and Plato. Joseph Esposito's work on Peirce's metaphysics frequently mentions its Platonic influences. In *Evolutionary Metaphysics*,<sup>38</sup> Esposito points out that Peirce's earliest metaphysical speculations occur in his writings on Plato in 1860, and that his latest metaphysics has a distinctly Platonic character. By the end of the nineteenth century, "Peirce is in a position to ponder once more, as he had forty years earlier, the question of the Platonic universe, and with it the logic of the universe, the logic of things, the logic of events." (191) In his article "The Development of Peirce's Categories," Esposito described Peirce's later metaphysical thought as a rekindling of Peirce's "half century-love affair with Plato."<sup>39</sup> Esposito says very little about this "love affair" but ends his article in this way:

As Peirce began to see pragmatism not as a method whereby ideas become clarified in the practice of inquiry, but as a method whereby inquiries become subject to the controlling influence of 'living' Ideas, it became evident that

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<sup>37</sup> On this count, see also the first chapter of Herbert Schneider's *A History of American Philosophy*, 2<sup>nd</sup> ed. New York: Columbia University Press, 1963.

<sup>38</sup> Esposito, Joseph L. *Evolutionary Metaphysics: The Development of Peirce's Theory of Categories*. Athens: Ohio University Press, 1980. Cf. especially pp. 46-47 and 190-193

<sup>39</sup> Esposito, Joseph L. "The Development of Peirce's Categories," *Transactions of the Charles S. Peirce Society*. Winter, 1979; XV, 1 p. 59

pragmatism would have to have a foundation nearly as deep as metaphysics itself. Had Peirce fully completed [his proof of Pragmaticism] he would have had to embrace openly the evolutionary Platonism he had kept so long in the background.<sup>40</sup>

Joseph Ransdell has argued more recently that the best way to understand Peirce's logic is to return with Peirce to its earliest accessible roots. Ransdell writes that

Peirce was a radical thinker, attempting to re-think and re-establish logic at the most fundamental level, and it is appropriate to go back to the beginnings of logic in the West to understand what this means. The Aristotelian account of the syllogism...does not provide the basic problematics needed to understand Peirce's enterprise...[it] must be sought earlier. Socrates, known through Plato, is the resource wanted.<sup>41</sup>

Ransdell continues by saying that in his article he can only begin to do this investigation suggestively. Ransdell focuses on what he calls the Socratic element in Plato, by which he means Plato's method and ethics of inquiry, represented in the figure of Socrates in the dialogues, as distinct from Plato's broader ethics and his metaphysics. It is plain from his opening remarks as well as from his reconstruction of Peirce's view of scientific and philosophical inquiry, that Ransdell writes this as an invitation for future scholars to continue the pursuit of Peirce's engagement with the Socratic in Plato.

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<sup>40</sup> Esposito, Joseph L. "The Development of Peirce's Categories," *Transactions of the Charles S. Peirce Society*. Winter, 1979; XV, 1 p. 60. In an email to me on 7/20/04, Esposito mentioned that he soon plans to write a book on Peirce's metaphysics "which tries to unify his metaphysics in a way that would have thrilled Plato and frustrated Aristotle."

<sup>41</sup> Ransdell, Joseph. "Peirce and the Socratic Tradition." *Transactions of the Charles S. Peirce Society*. Summer, 2000; 36(3): 342.

Several works have addressed Neo-Platonic themes in Peirce's thought, most notably Kelly James Parker's "The Ascent of Soul to Noûs: Charles S. Peirce as Neo-Platonist."<sup>42</sup> There Parker suggests that, as an alternative to the "end of metaphysics" we might attempt a "thorough reconstruction of metaphysics" by looking back into the tradition that gave rise to—and was ultimately eclipsed by—modern materialist metaphysics. This will mean a reinvestigation into Neo-Platonism, and "how Neo-Platonism can accord with modern science." Parker then claims that this is what Peirce attempted. He begins with "[tracing] lines of possible Neo-Platonic influences on Peirce's thought." He argues that "though there are no obvious direct influences, there are sufficient indirect connections to justify a reading of Peirce as a modern Neo-Platonic philosopher." He continues by identifying some Neo-Platonic features of Peirce's thought and then "comparing Peirce's cosmology to that of Plotinus." He concludes with a proposal that Peirce's philosophy be taken "as a model for 'scientific Neo-Platonism.'" Parker is right to claim that there are "no obvious direct influences," but it is nevertheless true that there are numerous indirect influences (both obvious and not-so-obvious). His concern is not so much with the development of Peirce's thought as with offering Peirce's thought as a model for adapting Neo-Platonism to contemporary scientific thought.

The closest anyone has come to writing such a monograph is an unpublished essay by Kenneth Laine Ketner on "Peirce and Plato."<sup>43</sup> Ketner's essay is a broad sketch of the importance of Plato's thought to Peirce's. He argues that Peirce owed a lifelong

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<sup>42</sup> In R. Baine Harris, ed. *Neo-Platonism and Contemporary Thought, Part One*. Albany, NY: SUNY Press, 2002; (165-182).

<sup>43</sup> Ketner, Kenneth Laine. "Peirce and Plato." Unpublished paper, copyright Kenneth Laine Ketner, Sept 2, 1999.

debt to his early reading of the *Theâetetus*, and that this is especially seen in Peirce's logic and semeiotic. I will discuss Ketner's paper and the importance of the *Theâetetus* for Peirce in chapter five.

In order to come to a richer and fuller understanding of the development of Peirce's thought, then, it would be helpful to have an account of Peirce's view of Plato. So far, no such account exists. This is partly due to the difficulty of reconstructing this account. Readers of Peirce's writings on Plato are faced with the problem of reconciling apparently contradictory statements therein. Many of Peirce's early writings show disdain for Plato's writing, for his metaphysics, for his lack of scientific training and method, and for his logic. Peirce's later writings, on the other hand, praise Plato precisely for his writing and for metaphysical, scientific, and logical thought. It is not simply the case, however, that in his early years Peirce disliked Plato and in his later years he admired Plato. If that were the whole story, it would hardly be worth telling. Peirce's relation to Plato is better told in terms of a dialogue between Peirce and Plato. Plato was influential in Peirce's early thought, often because Plato offered (or seemed to offer) a position that illustrated an error in logic or in method. In Peirce's later years, as he began to read Plato more closely, he discovered in Plato a fellow inquirer whose researches would prove fruitful models for Peirce's own thought.

### **The need for an history of the development of Peirce's thought on Plato**

In what follows I will offer three examples drawn from Peirce's writings that illustrate the importance of Plato for Peirce's thought. These examples also underscore the dramatic shifts that took place in Peirce's esteem of Plato's philosophy. Plato was

present as an influence on Peirce's early thought, and Peirce knew Plato well both from his studies and from living in a culture that was steeped in Platonism. As Peirce matured as a thinker, he found himself in need of the resources of ancient philosophy. Earlier Peirce had viewed Platonism as incapable of rational proof. This was partly due to received opinion and partly due to the undeveloped state of Peirce's logic. Peirce's development of the logic of abduction; his attempts to work out the doctrine of synechism; and his beginning to read Plato in Greek, leading to his discovery of Plato's logic, all paved the way for Peirce to embrace a version of Platonism.

### **Peirce's Reading of Plato in Greek**

Peirce's penchant for intellectual autobiography provides an illustration of the growth of his complex relationship to Plato. Peirce made frequent reference to what he read and how it influenced his thought, and by tracing these statements, two things become plain: first, that the only partial publication that they have received seems to indicate that Peirce simply disliked Plato and had little use for his thought. Second, when all these statements are taken together, it can be seen that this popular view of Peirce's relation to Plato misses the mark altogether. In 1894 he wrote two versions of a statement entitled "My Reading in Philosophy." One version of his statement<sup>44</sup> has become fairly well known among Peirce scholars since Carolyn Eisele published it in 1985.<sup>45</sup> In it he makes the claim that he had "never cared for Plato, and [had] read him only in translation," adding that he read Aristotle in Greek. Another version of this

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<sup>44</sup> *MS 1604*.

<sup>45</sup> *HP II* 863-5.

document<sup>46</sup> reads similarly: “[I] have read rather cursorily [a] translation of Plato, and Zeller and Grote and a good many things. But I don’t take any extraordinary interest in Plato.”<sup>47</sup> The former version seems to bespeak distaste for Plato, but this is tempered by the “extraordinary” of the latter version.

Regardless of how Peirce felt about Plato, his knowledge of Plato was extensive. In evidence of this, he continued in *MS 1604* by saying that a few years earlier he had written the definition of “Platonism” for the *Century Dictionary*<sup>48</sup> from memory while on vacation at Niagara Falls.<sup>49</sup> His definition is brief but comprehensive, and could not have been written by someone with only a passing knowledge of Plato.

Platonism, Peirce had observed earlier, was “incapable of proof,” and, in some of its formulations, “a self-contradictory opinion.”<sup>50</sup> Peirce’s statements, taken on their own, sound like a strong condemnation of Plato in Peirce’s later years, but they should not be taken as the last word. In 1894 Peirce did regard Aristotle as far superior to Plato in logic and in scientific rigor of thought. But Peirce plainly also had a high regard for Plato. In the *Century Dictionary* definition, he wrote that “Plato wrote in dialogues which are equally admirable from a literary and philosophical point of view.” This could of course be read to mean that the dialogues are neither admirable as literature nor as philosophy, were it not for what Peirce wrote next. He continued by pointing out that Plato held “that

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<sup>46</sup> *MS 1605*.

<sup>47</sup> Zeller and Grote wrote histories and summaries of ancient philosophy. *MS 1605* has never been published.

<sup>48</sup> *CD 4540*.

<sup>49</sup> *MS 1604*. In fact, his definition, probably written in 1889, is of “Platonic,” but it serves in the *Century Dictionary* as the definition of “Platonism,” for which there is no entry. The entire entry can be found in chapter three of this dissertation.

<sup>50</sup> *CP 8.18*.

without a deep sense of ignorance no man can philosophize,” a position very similar to what Peirce held in “The Fixation of Belief”:

Some philosophers have imagined that to start an inquiry it was only necessary to utter a question whether orally or by setting it down upon paper, and have even recommended us to begin our studies with questioning everything! But the mere putting of a proposition into the interrogative form does not stimulate the mind to any struggle after belief. *There must be a real and living doubt*, and without this all discussion is idle.<sup>51</sup>

Peirce also described Plato as holding to something like a realist Pragmatic epistemology, and very much like that articulated two decades later by fellow pragmatist F.C.S. Schiller in his *Plato or Protagoras?*<sup>52</sup> “Plato held that...man is the measure of all things, not in his experience of particular facts, as Protagoras would have it, but in his knowledge of reasons, which alone is ennobling.”<sup>53</sup> I will discuss this in some more detail below and in the chapter on the *Theaetetus*. For now it suffices to point out that Peirce’s low esteem for Plato was not so much for Plato’s doctrines or for his thought in general, as for what he perceived as a lack of logical rigor in Plato’s development of those doctrines. This was a mistake in judgment Peirce overcame, however, when he began to read Plato in earnest several years later.

The transformation of Peirce’s view seems to have been precipitated at least partly by his reading of Plato in Greek, beginning in the late 1890s. The effects of this transformation are evident in a lecture he delivered just four years after writing “My

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<sup>51</sup> CP 5.376, italics mine.

<sup>52</sup> Schiller, Ferdinand Canning Scott. *Plato or Protagoras? Being a Critical Examination of the Protagoras Speech in the Theaetetus with Some Remarks Upon Error*. Oxford: B.H. Blackwell, 1908.

<sup>53</sup> CD 4540.



Reading in Philosophy.” As I mentioned earlier, in 1898, Peirce addressed an audience in Cambridge, Massachusetts,<sup>54</sup> telling them that every true philosopher is a mathematician and every true mathematician is a Platonist. In that lecture he stated that Plato is “at once more in the wrong and more in the right than any other philosopher,” and he cited Plato so many times as a positive example of how to think philosophically that he felt compelled to apologize for it. He had earlier written to William James stating that there was nothing in his lecture that was “not substantially in Plato.” Peirce’s manuscripts from this time include dozens of pages concerning philological details of Plato’s Greek, and long comments on translations. For instance, his copies of Plato’s works and of works on Plato in this period contain marginalia concerning the proper translation of Greek terms. Peirce often complains that the major translators have erred in their work. For instance, one two-page manuscript (*MS* 987) is devoted to the charge that Benjamin Jowett is a poor translator, with a lengthy discussion of how a passage at Stephanus page 944b of Plato’s *Laws* should have been translated, had Jowett been doing his job right.<sup>55</sup> In this period Peirce also appears to have begun his own translations of the *Cratylus* and the *Apology*.<sup>56</sup> The *Apology* translation (*MS* 973) is Peirce’s own “free translation,” and is some 20 pages long. The longer of the two *Cratylus* translations (*MS* 986) is only six manuscript pages, but it is full of comments on the translation. Peirce noted in another manuscript that he considered the reasoning of the *Cratylus* to be “scientific.”<sup>57</sup> Peirce also made up catalogues of Plato’s works, noting in the margins the

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<sup>54</sup> In his Cambridge Conference Lecture, “Philosophy and the Conduct of Life,” published in *EP II*, 27-41.

<sup>55</sup> This *MS*, dated 1906, is peculiar, and may not be written in Peirce’s hand, though it is his voice. The top of the page has a note stating “Jowett Pierce [sic] note.” At any rate, it is consistent with the other *MSS* from this period.

<sup>56</sup> See chapters 7 and 8 on these translations.

<sup>57</sup> *MS* 974.

literary tropes and metaphors that Plato used in the Greek. Also in this period, Peirce devoted scores of pages to close studies of the frequency of various Greek words and phrases in many of Plato's dialogues. This is a dramatic change from having "read [Plato] only in translation."

The distinction between Plato and Aristotle that appears in such sharp relief in the 1894 manuscript on Peirce's reading in philosophy became far less marked beginning just after he wrote that. Peirce had previously regarded Aristotle as more concerned with logic, mathematics, and science than Plato. By 1898 his reading of Plato's Greek led him to note that many elements of Aristotle's logic are not only anticipated in Plato but even mostly developed there. In commenting on Aristotle's notion of induction, Peirce discusses the origins of Greek the names given induction by Socrates, Plato, and Aristotle, citing the Greek text of the *Timaeus* and the *Republic*, and noting the strong similarity among all of them.<sup>58</sup> Three years later, citing the Greek text of the *Philebus*, the *Theaetetus*, the *Phaedrus*, and the *Charmides*, Peirce approvingly cited an observation by the Polish philosopher and philologist Wincenty Lutoslawski: "If we take into consideration that it would be entirely against Plato's view of literary composition to enumerate all possible figures of syllogism in a dialogue, as is done in Aristotle's treatise, it becomes possible and even probable that Aristotle's theory of syllogism was more than prepared by Plato." In a lecture he delivered two years later he referred to "the Platonic philosophy of which Aristotelianism is a special development."<sup>59</sup> This may seem a very slight nod to Plato, but taken together with Peirce's self-description as an Aristotelian three sentences later, it stands in sharp contrast to his earlier comment that he had "never

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<sup>58</sup> CP 5.579.

<sup>59</sup> EP II, 180.

cared for Plato.” In 1894 he had never cared for Plato; in 1903 he effectively called himself a kind of Platonist. This regard for Plato as a thinker endured for the remainder of Peirce’s career. In 1909 Peirce wrote to Samuel Barnett, giving an account of what philosophers had made the greatest impact on his thought. Peirce wrote that when he was younger he “had read a little Plato but had quite failed to appreciate the logical importance of the Dialogues which I subsequently made a very thorough reading & study of & made out (what is very important) the chronology of them...”<sup>60</sup> This is striking, since Peirce goes into some detail about his study of Plato, but writes only one sentence about Aristotle. The sentence about Aristotle doesn’t come until after Peirce writes about Plato: “I also made a study of Aristotle’s Organon, Metaphysics, De Anima, and some of the minor works.” This is even more striking when one remembers that Peirce was writing to Barnett about logic. That Aristotle should receive second billing to Plato in a letter on logic indicates a significant change in Peirce’s view of Plato.

## **A Second Example: Peirce on Socratic “Induction”**

Peirce’s newfound appreciation of the logical importance of Plato’s dialogues can be seen in what he says about Plato and the logic of induction. An examination of Peirce’s writings on induction reveal a gradual but dramatic shift in Peirce’s disposition towards Plato as a logician. In 1893, in his fifth Lowell Lecture, Peirce disparaged Plato’s Socratic induction as being a mere unscientific searching for examples to support our biases:

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<sup>60</sup> Peirce to Barnett, 20 December 1909. The letter is reproduced *in toto* in Meyers, Robert G. and Popkin, Richard H., “Early Influences on Peirce: A Letter to Samuel Barnett,” in the *Journal of the History of Philosophy*. 31(4); 619.

The Greek mind was not distinctively scientific. It might be called a *sly* mind; and slyness is the very reverse of the straightforward sincerity with which the scientific man must be animated. The Greeks had a rooted distrust of induction. This appears most clearly in a work found in Herculaneum. It is the treatise of an Epicurean philosopher (*peri sémeiôn kai sémeóseión*,) ‘concerning indications and things indicated’. It is really a defense of induction, which the Epicureans, alone among the schools of Athenian Philosophy, seriously endeavored to utilize. The Stoics, who in the ancient world corresponded to the Scotch school with us, the commonsense philosophy which strongly appealed to average and mediocre intelligence, utterly repudiated induction. Aristotle believed in it theoretically, at least as a good rhetorical argument; but practically he did his best to steer clear of it. Plato followed Socrates in praising induction; but after all, he only means the appeal to examples to ascertain what our own opinions and feelings may be, in order to frame definitions in accordance with them. Now this is very far from being the objective induction or generalization upon which natural science is built. Surely a people who had no confidence, or any limited degree of confidence in well-constructed inductions from observed facts, was very far indeed from being a nation of scientific minds.<sup>61</sup>

This criticism resembles his earlier criticism of Plato’s thought in “The Fixation of Belief” in 1878. There Peirce writes that Plato’s thought is, like the other “a priori”

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<sup>61</sup> (*HP I*, 204.) Compare this text with *MS 1604*, “My Reading in Philosophy,” and contrast it with the 1905 letter to Lady Welby and *MS 753*, both on Induction later in Peirce’s career. Also worth noting what Peirce wrote in or around 1898 in *MS 978* concerning the waning of Plato’s intellectual powers when he wrote the *Theaetetus* and especially the *Sophist*. Note how he changes his position on that in “Philosophy and the Conduct of Life.”

methods, unscientific because they make preferences into principles and fail to make use of real induction or observed facts.

Systems of this sort have not usually rested on any observed facts, at least not in any great degree. They have been chiefly adopted because their fundamental propositions seemed “agreeable to reason.” This is an apt expression; it does not mean that which agrees with experience, but that which we find ourselves inclined to believe.<sup>62</sup> Plato, for example, finds it agreeable to reason that the distances of the celestial spheres from one another should be proportional to the different lengths of strings which produce harmonious chords. Many philosophers have been led to their main conclusions by considerations like this; but this is the lowest and least developed form which the method takes.... This method is far more intellectual and respectable from the point of view of reason than [the methods of tenacity and authority].... but its failure has been the most manifest. It makes of inquiry something similar to the development of taste.<sup>63</sup>

Yet in 1905 he wrote to Lady Victoria Welby<sup>64</sup> of his rapturous daylong study of the Greek text Plato’s *Theâetetus*, extolling Plato’s writing, expressing admiration for Socrates, and suggesting that criticisms of Socratic induction have been mistaken because Socrates is not actually attempting induction but *abduction*, that is, “reasonings from surprise to inquiry.” Peirce writes, “I spent yesterday in reading the *Theâetetus*; and... it

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<sup>62</sup> This criticism of reason as a reliable source of certain propositions is a running theme throughout Peirce’s life. Cf. “Philosophy and the Conduct of Life,” in *EP II*, 31 on “the perfection of human reason.”

<sup>63</sup> *Philosophical Writings of Peirce*, Justus Buchler, ed. NY: Dover, 1955. Pp 14-15.

<sup>64</sup> All citations in this paragraph are from a draft of a letter from CSP to Victoria Welby, written July 10 or 16 (the handwriting is uncertain) of 1905. The letter is a draft, and no original has been found among Lady Welby’s letters. This letter has not been printed in either collection of the Peirce-Welby correspondence, and was furnished to me by Cornelis de Waal at the Peirce Edition Project.

made an impression of novelty upon me such that I almost doubt whether I ever read it before in the original....It is as lifelike as Plato's dialogues generally are." He declares his belief that the *Phaedo* is not a fiction, apparently in part because in the *Phaedo* Socrates professes that as a youth he was devoted to Natural History, i.e. "a recognized science." Concerning Plato's use of irony, Peirce states that

Truly it is remarkable that irony should produce upon us such profound veneration....and the impression produced by the Socratic irony is that of such thorough single-mindedness that those of us who are least apt to feel veneration (witness I) cannot resist it in the case of this man. It is only in irony, or before the very face of death, that such sincerity as his can find its expression.

The remainder of the letter is devoted to a discussion of Socratic induction. Peirce's conclusion is to grant Aristotle's charge that what Socrates is doing should not be considered induction (since it does not have an empirical basis) but to reassess Socrates' method of reasoning as pre-inductive. Socrates is reasoning from surprising facts to a basis for inquiry. This, Peirce says, is the logic of Abduction, or of "the process of conjecturally setting up a theory suggested by the study of surprising facts to explain their being surprising," or "reasonings from surprise to inquiry." Abduction is the form reasoning takes when "the character of the facts which makes them require explanation is the violation of a *warranted* inductive conclusion...or in other words these facts being justly surprising."

## **Henry James, Sr., Religion, and Platonism**

A third example of the evolution of Peirce's attitude toward Plato may be found in Peirce's writings on religion. Peirce's review of James is important because it attests to Peirce's lifelong interest in Plato and shows the appeal certain Platonic doctrines had for him. Most significantly, it illustrates what Peirce found objectionable about Platonism, as well as the way he eventually overcame that objection. Peirce was drawn to Platonic metaphysics and to the theologies that have been built upon it. Despite its attractiveness, he rejected Platonism in his early years because it was dogmatic and its conclusions were indemonstrable. Acceptance of dogma without demonstration forcibly closes off an avenue of inquiry. This pretense of infallibilism is never defensible, because we only know what we have hypothesized, observed, and deduced. We cannot know now what will only be known in the future, but claims of infallibilism are claims to know that present knowledge will not be controverted or falsified in the future. In later years, Peirce discovered that Plato was in fact a fallibilist and, to a small degree, an evolutionist, with a better-developed logic of inquiry than the historians of ancient philosophy had led him to believe.

In 1870, Peirce wrote a review of Henry James, Sr.'s *Secret of Swedenborg*. The review took a favorable view of James' conclusions, namely that the matters in life that are closest to the heart are also those closest to the mind and that an appeal to "the sanction of the heart" is an appeal to religious experience. Concerning James' Swedenborgianism, Peirce said that "the spiritual tone of it is in general eminently healthy," and that "anybody who can make the truth of this evident will do a good thing for religion." These "eminently healthy" doctrines, he notes, are Platonic. Peirce writes that there are

distinct traces of the influence of Platonism upon Swedenborg....what Mr. James calls the form is the Platonic idea or form, and the doctrine that God is the highest idea of form, the idea of good, and the forms of forms, belongs of course to Plato. The singular conception that form is from its nature living is decidedly Platonic. So also is making numerical unity to depend upon form, and quantity upon matter. The statement that matter, or that what exists besides God, is nonentity, is made with equal clearness by Mr. James and Plato. The doctrines that there is a spiritual perception which is at the same time an act of abstraction of quantities from qualities, that nature is a mere manifestation or revelation of the Divine idea, that this manifestation is, in some sense, an inverted one, that there is a world-soul or *maximus homo*, and that the divine part of the human soul corresponds to it, that the Divinity in the soul is to be compared to the sun shining on the world, that our cognition of necessary truths is a sort of memory, are doctrines which are to be found both in this book and in Plato or Plotinus.

Peirce's admiration of James' Swedenborgianism was apparently of an enduring character. He cited James' *Substance and Shadow: An Essay on the Physics of Creation* very favorably at the beginning of his *Monist* article, "Evolutionary Love," which appeared in January of 1893.<sup>65</sup> There he called James a genius who, when he was not scolding his reader, was easily capable of filling his works with "sublime" sentences. One of these sentences provides what Peirce considered an "everlasting solution" to the problem of evil:<sup>66</sup> "It is no doubt very tolerable finite or creaturely love to love one's

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<sup>65</sup> Reprinted at *EP I*, pp. 352ff. Citations from "Evolutionary Love" in this paragraph are all taken from *EP I*, pp 352-3.

<sup>66</sup> This "solution" is not merely Jamesian, but is also nearly identical to the dialectical metaphysics of creation found in Jacob Boehme. Though I do not discuss it in detail, Peirce mentions his own relation to



own in another, to love another for his conformity to one's self: but nothing can be in more flagrant contrast with the creative Love, all whose tenderness *ex vi termini* must be reserved only for what intrinsically is most bitterly hostile and negative to itself.”<sup>67</sup> This opening paragraph of “Evolutionary Love” traces the idea of love from its earliest emergence in Western philosophy to the Pre-Socratic Empedocles, and from there through St. John the Evangelist and Swedenborg to James. Peirce dismisses a Gnostic dualist cosmology wherein *eros* is one of two equal but opposite creative powers. This is evident in his interest in the anti-Gnostic St. John, “the ontological Gospeller.” In Peirce’s account, strife, hatred, and evil “are mere imperfect stages of *agapé* and *agathón*, love and loveliness.” Peirce’s account of love, then, mirrors the Neo-Platonist versions of *eros* found in Plotinus and Jacob Boehme.<sup>68</sup> Though neither Boehme nor Plotinus is named in this essay, he named both in his article “The Law of Mind,”<sup>69</sup> which appeared in the *Monist* just six months earlier.

Five years later, when living alone at Arisbe and preparing his 1898 Cambridge Conference lectures, Peirce wrote to William James that James’ father’s writings on religion still rang true. Peirce wrote “I am all alone in the house here and have spent some of the quiet hours over *Substance and Shadow* [one of Henry James, Sr.’s books on Swedenborg] and in recalling your father. My experiences of the last few years have

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Boehme—whose creation story is evolutionary, and which requires a fundamental love that embraces hatred as a necessary part of itself in order that existence might be thrown out into the world in goodness—in “The Law of Mind.” I discuss this piece in chapter three, where I address more fully than I do in this chapter Peirce’s reference to the “transcendental bacilli” with which he was infected in “the neighborhood of Concord” and which descended from Boehme and other neo-Platonists.

<sup>67</sup> According to the note at *EP I* p.353, this is from p. 442 of *Substance and Shadow*, but no edition is given, so presumably the first edition is meant.

<sup>68</sup> I will address Peirce’s relation to Plotinus and Boehme—indirectly, through Emerson—in chapter three.

<sup>69</sup> *EP I*, p. 313. *Monist* 2 (July 1892): 533-59.

been calculated to bring Swedenborg home to me very often.”<sup>70</sup> In 1905 or 1906, Peirce cited James, Sr.’s *Swedenborg* again favorably as one of the sources that helped him to formulate his Pragmaticism.<sup>71</sup>

Nonetheless, despite their healthiness and desirability, these religious views are wanting in scientific rigor and persuasiveness. “Perhaps Mr. James is of opinion that to appeal to the ‘sanction of the heart’ is to appeal to experience, namely, to religious experience. Anybody who can make the truth of this evident will do a good thing for religion; but, as yet, it has not yet been made out.” Presumably, the same is true of the Platonic basis of the arguments. Peirce cannot adopt James’ religion, he complains, because it is mysticism, not science.

Religion fails to be philosophy while it appeals not to the head, but only to the heart. In saying this, we do not in the least oppose the Scotch philosophy which makes all knowledge finally to repose on what are sometimes called ultimate beliefs....If religion can be traced to such premises, it becomes truly philosophical.

In his 1870 review he wrote, “these things, however, are not scientifically established...that being so, why call them philosophy?” If Peirce finds James’ Swedenborgianism attractive, and if he thinks it is really only a form of Platonism, then it is reasonable to conclude that Peirce thinks Platonism is essentially an attractive mysticism, not a logical or scientific set of doctrines.

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<sup>70</sup> Cited in *RLT*, 19.

<sup>71</sup> *CP* 5.402.

By 1907 Peirce had come to affirm much of James' Platonistic religion *philosophically* in his "Neglected Argument For the Reality of God." For instance, James' claims that "philosophy and religion are one, [and] the matter of deepest moment to the heart is the matter of deepest moment to the head" are met in the "Neglected Argument" with Peirce's appeal for inquiry done in "scientific singleness of heart," a phrase Peirce uses several times in the "Neglected Argument."<sup>72</sup> Science, normally thought of as a matter of the head, has become aligned with the heart. James seems to imply that matters of religion need not be argued because their premises are unarguable but probably universally accepted beliefs. In his review, Pierce affirms such common-sensism but points out that James has failed to make a solid case for it. In the later "Neglected Argument" Peirce suggests that all theists may indeed have unconsciously made use of a version of a common-sense argument. Most interesting, however, is what Peirce has to say about Plato's Ideas or Forms in these two documents.

The "Neglected Argument" begins, in scholastic form, by giving definitions. One of the first definitions given is of "Idea." Peirce, explaining the conventions he will be following, writes,

Some words shall herein be capitalised when used, not as vernacular, but as terms defined. Thus an "idea" is the substance of an actual unitary thought or fancy; but "Idea," nearer to Plato's idea of *idea*, denotes anything whose Being consists in

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<sup>72</sup> This phrase, which occurs several times in the "N.A.," also calls to mind the benediction that closes the Anglican liturgy and St. Luke's description of the early Christian Church in the book of Acts, as I pointed out in my paper to the SCP two years ago. This is a recurring theme with Peirce, as in his answer to the survey concerning his religious views, where he states, concerning God, that "the heart too is a perceptive organ."

its mere capacity for getting fully represented, regardless of any person's faculty or impotence to represent it.

This last sentence is instructive of how the later Peirce came to view Plato's forms or ideas. First, Peirce does not simply adopt some earlier version of Platonism. Note that he says "Idea" will mean something "nearer to Plato's idea of *idea*." That is, "Idea," while similar to Plato's idea of *idea* (whatever that idea was), will not be identical to it. Peirce is saying that he finds something useful in Plato's *ideas*, but that something will need some modification. Second, the useful kernel seems to have something to do with the reality of the ideas. They are independent of thought, i.e. not mere names. Third, this definition is a strange definition, since it says nothing definite, but only explains somewhat vaguely what "Ideas" are, first by comparing them with Plato's idea of *idea* (though never saying just what that means), and then by giving a vague definition for which it would be impossible to present a concrete example of the thing defined. In this Peirce departs significantly from received Platonic doctrines, in which the ideas or forms have a kind of brute existence, though not in the world of particulars. For Peirce Ideas are not existent things but things that could exist, that is, in Peircean terms they are firsts. Their being is a possible being. It is also a general kind of being. Part of the difficulty of explaining what an "Idea" is has to do with the fact that "Ideas" must be in some other realm than in the realm or, as Peirce put it, "universe" of brute existences.<sup>73</sup> Of course, Peirce identified two such realms, those of firstness and thirdness. "Ideas," on this account, seem to span both of these realms, having the possible existence of firsts

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<sup>73</sup> He uses this language of universes frequently. Cf. CP 2.339, 2.517ff, 4.546, 4.549, etc.

(“capacity for getting represented”), and the general being of thirds (“fully represented”). Peirce concluded that Plato was beginning to see, in his late writings, that he needed not two but three categories of being. Peirce borrowed from the tradition of Platonism the notions that the forms have some real being without existing in the world; and that the forms have some relationship to the world. His solution to the problems that arise in this scheme was to separate the forms into two categories of being which correspond to his categories of firstness and thirdness. (I will return to this theme and develop it further in chapter five, on the *Theaetetus*.)

What is important here is that Peirce’s “Neglected Argument For the Reality of God,” and his later religious writings, show a marked resemblance to the Platonistic religion he saw in Henry James, Sr.’s earlier writings. Where James wrote that “That root of existence for which metaphysics inquires is God,” Peirce wrote in the “Neglected Argument” that “God” means the “*Ens Necessarium*” and “creator of all three Universes of Experience.” Both essays are concerned with a distinction between “being” and “existing”; both are concerned with Plato’s notion of an “idea”; both argue that religion, were it proved, would be “a good outweighing all others”; and both emphasize the importance of reconciling the “heart” with the intellect, claiming that the heart is insightful in matters of highest importance. It is reasonable to conclude from this that Peirce found this religious aspect of Platonistic thought attractive both in 1870 and in 1907. But while in 1870 he thought it mere mysticism, by 1907 he had somehow come to the view that this kind of Platonistic religion has, in fact, a logical basis.

### **Consequences of Peirce’s Study of Plato’s Logic in the 1890s**

Peirce found himself able to affirm a kind of Platonism after his intense study of Plato in the late 1890s, and his subsequent reevaluation of Plato's logic. The early Peirce was put off by the dogmatic character of the Platonism he received, and by an apparent lack of logicity in Plato. When he returned to Plato later, these problems were overcome at least in part by reading Plato in the chronological development of his thought. (I will return to these themes in chapter 3, when I discuss Peirce's early conceptions of Platonism and his later reading of Lutoslawski.) This underscores the importance of understanding Peirce's view of the history of philosophy, a view which was shaped through his reading of Plato and through his discovery that his earlier conception of Plato was largely warped by a mistaken view of ethics.

So it is the case, then, that the early Peirce admired many of Plato's conclusions, but did not see Plato offering a logical basis for them. Later in life, Peirce attended more closely to Plato's writings in order to chronologize them. In so doing, Peirce discovered an attractively scientific method of inquiry in Plato's later works. Not surprisingly, the method includes fallibilism, community, continuity, realism, and humility, not all of which had been properly emphasized in previous treatments of Socrates' method. The importance Peirce placed on these elements – and especially on fallibilism and continuity—entered Peirce into the camp of those who insist that Plato's thought developed. Since Platonism often is taken to mean little more than what is called the “Theory of Forms,” the developmentalist Platonists tend to emphasize the development of Plato's thought concerning the forms. This is certainly the case with Peirce, but Peirce is not interested in adopting the latest version of Plato's theory (if indeed there is such a theory). Peirce's interest in Plato's method was more of an interest in the method of

discovery and the logic that Plato might have used in developing his ideas. Peirce came to see that Plato's logic includes not only what is commonly called Socratic induction, but also the germ of what Peirce came to call "abduction." For Peirce, then, what is most interesting is not the content of Plato's final formulation of his "theories," but the development of his method. Peirce's discovery that the dialogues contain a good deal about such a development prompted him to make a closer study of Plato's works, in the course of which Peirce saw the beginnings of a developmental metaphysics.

Peirce's inquiries into Plato's work were historical and textual, but Peirce was not merely attempting to write intellectual history. His researches in the history of philosophy allowed him to participate in a dialogue with Plato through a reading of Plato's works. Deledalle, Esposito, Ketner and Fisch have all remarked that Peirce worked his way backward through the history of philosophy as he worked through his own system of thought.<sup>74</sup> He began with Kant in the 1860s, until he had seen his way through to a new list of categories. The establishing of these categories brought him backwards through the psychologies of Hume, Berkeley, and Descartes; to the realism/nominalism controversy in the late Middle Ages; and ultimately to the Ancients. In the 1880s and 1890s Peirce was struggling with the notion of firstness, and this led him to the Ancients.<sup>75</sup> Fisch has written in "Peirce's Arisbe" about how Peirce read and responded to Empedocles and the Milesians, but very little has been said about his

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<sup>74</sup> For instance, see Fisch, Max H. "Peirce's Arisbe: The Greek Influence in His Later Philosophy." *Transactions of the Charles S. Peirce Society*, fall 1971; 7: 187-210; Esposito, Joseph L. "The Development of Peirce's Categories," *Transactions of the Charles S. Peirce Society*, (Winter 1979) XV, 1:51-60; Deledalle, Gérard. "Cosmology: Chaos and Chance within Order and Continuity: Peirce between Plato and Darwin" in *Charles S. Peirce's Philosophy of Signs: Essays in Comparative Semiotics*. Bloomington: Indiana University Press, 2000. pp. 162-169; and Kenneth L. Ketner's unpublished paper on Peirce and Plato. Deledalle also makes this point in his *Charles S. Peirce: An Intellectual Biography* (Translation of *Charles S. Peirce: phénoménologue et sémioticien*. Amsterdam and Philadelphia: John Benjamins Publishing Co., 1990) especially in the chapters on Greek cosmology.

<sup>75</sup> This is Esposito's argument in Esposito 1979.

dialogue with Plato. Yet, as I mentioned above in my discussion of “Evolutionary Love,” Peirce’s explicit dialogue with Empedocles is mediated by the tradition of Neo-Platonism.

Through Peirce’s reading of Plato, Plato became his constant interlocutor in the late 1890s. In that dialogue, Peirce discussed the method of science and metaphysics. This change in Peirce’s attitude towards Plato is surprising, since in his earlier years he seemed to view Platonism so scornfully. But there are indications in Peirce’s early years that he always viewed Plato’s thought as holding the conclusions he wanted to reach<sup>76</sup>; his embracing of so much in Plato in his later years seems to indicate that he found in Plato what others had failed to discern, namely, arguments supporting those conclusions.

Clearly, sometime between 1894 and 1898 Peirce’s view of Plato’s worth as a thinker underwent a profound change. A close study of Plato’s writings began to occupy Peirce for the rest of his career. The manuscripts from the period immediately after 1898 are filled with pages of notations attesting to this close study. His letters and catalogues of books show even more closely that he devoted himself to experimental research in order to discover the development of Plato’s thought and to refine the method and the logic that should govern such inquiries. Other manuscripts and published pieces from his last sixteen years show the fruits of this research, and references to Plato crowd his work. In 1901 Peirce addressed the National Academy of Sciences with a long paper, one third of which was devoted to a study of Plato. His work on miracles, his research into laws of nature, his comments on Hume, all wind up referring to Plato and to a kind of Platonistic

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<sup>76</sup> For instance his 1860 manuscript, “Metaphysical Axioms and Syllogisms,” which Ketner has argued contains the germs of Peirce’s later Pragmaticism; his admiration of James’ Platonistic religious thought in his 1870 review of *The Secret of Swedenborg*, as I’ve detailed above; and the 1878 “How to Make Our Ideas Clear,” which lauds the “real spirit of Socrates” as being the truly scientific spirit.



and Socratic method. This connection will be discussed in more detail in chapter six. As I've already mentioned, in his well-known "Neglected Argument for the Reality of God," published in the September, 1908 issue of the Hibbert Journal, Peirce mentioned Plato in the opening paragraph, and Platonistic notions – of a kind – swirl continuously beneath the surface of the rest of the text.

What can account for this change? This question pertains to the history of philosophy. Answering it will require a method of dealing with the development of thought. Peirce espoused just such a method. In the next chapter I propose to look at Peirce's method and then apply it to his own thought.

## Chapter 2: Peirce on the History of Philosophy: development vs. “gems of thought”

As a matter of history, however, philosophy must always be interesting. It is the best representative of the mental development of each age. It is so even of ours, if we think what really is our philosophy. Metaphysical history is one of the chief branches of history, and ought to be expounded side by side with the history of society, of government, and of war; for in its relations with these we trace the significance of events for the human mind.<sup>77</sup>

Charles Peirce, 1871 – Review of Fraser’s *Berkeley*

Truly to paint the ground where we ourselves are standing is an impossible problem in historical perspective.”<sup>78</sup>

Charles Peirce, c. 1893

The reader has a right to know how the author's opinions were formed. Not, of course, that he is expected to accept any conclusions which are not borne out by argument. But in discussions of extreme difficulty, like these, when good judgment is a factor, and pure ratiocination is not everything, it is prudent to take every element into consideration.<sup>79</sup>

Charles Peirce, 1897

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<sup>77</sup> CP 8.

<sup>78</sup> CP 4.32.

<sup>79</sup> CP 1.3.

## Introduction

In this chapter I will outline Peirce's view of the history of philosophy, noting what his method of writing it was, how and why he came to think it important, and what implications this has for the present study. For Peirce, the study of the history of philosophy became increasingly important throughout his career. This was partly brought about by his discovery, while studying Philodemus' logic, that contemporary histories of philosophy tended to minimize the importance of medieval and ancient philosophy. These histories often displayed a poor sense of the logic of history and a baseless bias towards contemporary thought and nominalism. In Peirce's view, too often historians overstepped the bounds of sound historiography because they had a mistaken view of the logic of probability and they reasoned from poor premises. Their logic of probability led them to dismiss as unreliable testimony affirming any event or doctrine that struck them as improbable. Peirce's study was further reinforced by the practical need to write the philosophical and logical entries for the *Century Dictionary*. Most importantly, however, pragmatism as Peirce conceived it stresses the importance of the development of thought. This emphasis on development has epistemological as well as metaphysical significance. Epistemologically, the study of history matters because we do not know the present very well but know it better when we see it in its development. Furthermore, knowledge can grow as research progresses. Scientific knowledge reaches no end-state in history, but must always leave room for growth. Related to this is the notion that the cosmos itself is subject to growth. Laws of nature are not fixities but changeable habits that the cosmos takes on. As such, they are not known simply but increasingly over time as research approximates them more and more. All this implies an

ethic of inquiry: the researcher is obliged—both by an awareness of her fallibilism and by the fact that the cosmos is evolving—to study history and to situate her findings historically. Since knowledge grows as research progresses, no path of inquiry must be blocked. History, then, determines to some degree the method of scientific inquiry. This view of knowledge as evolutionary, combined with Peirce’s synechism and realism, also drove Peirce to consider the self as a subject in history. The self is neither stationary nor rigidly delimited, but grows and spreads at its vaguely defined edges. This is especially true where there is some irritation of doubt that provokes inquiry. Peirce’s response to his “irritations of doubt” was often to return to considering his own history. Much of what he wrote philosophically is interlaced with autobiographical considerations of the origins and growth of his own thought.

All of this is relevant for Peirce’s study of Plato. Peirce’s renewed interest in Plato climaxed right around the same time he first read Wincenty Lutoslawski’s *Origin and Growth of Plato’s Logic* in 1898. Lutoslawski’s title no doubt excited Peirce’s interest with its notion that logic—and even Platonism—have been subject to growth. If Plato’s logic grew beyond what is traditionally taken as Platonism, then so did his thinking about metaphysics. In particular, Peirce thought he saw in the later Plato a more fully developed logic and metaphysics than Peirce’s contemporary historians of ancient philosophy attributed to Plato. As I mentioned in the previous chapter, in logic this included a full-blown study of the syllogism that provided a firm foundation for Aristotle to build on; a well-developed awareness of induction; and the intimations of abduction. In metaphysics Peirce detected in Plato a suspicion of the necessity of having not two but three ontological categories. This would imply that modern thinking, inasmuch as it is

based on the assumption of a rigid two-level model of Plato's metaphysics and epistemology, might well have missed something important discovered by Plato, and so might be based on mistaken premises.<sup>80</sup>

In turn, Peirce's study of Plato will provide a model for the study of Peirce. As I stated in the previous chapter, Peirce's writings on Plato are scattered and could appear to constitute unrelated "gems of thought." I propose to draw on Peirce's model of discovering the development of Plato's thought in order to show the development of Peirce's thought.

### **Peirce's method and logic of the history of philosophy**

Peirce wrote on the history of philosophy a number of times in his career. Late in his career Peirce developed a method and logic of drawing the history of philosophy. This method developed out of his own researches, especially his work at Johns Hopkins with his doctoral student Allan Marquand; his preparations for the 1892 Lowell Lectures in the History of Science; and his research into the development of Plato's logic from 1897 onwards. Briefly, his doctrine of method is that, whenever possible, original texts should be studied in their chronological order; that historiography is the work of a

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<sup>80</sup> As this is not a dissertation on Peirce's philosophy of history, I will not dwell on the logical and metaphysical problems that arise out of Peirce's consideration of history. While Peirce does appear to have a philosophy of history, he never articulates it as a system. For further discussion of some of the difficulties arising from Peirce's view of history, see Joseph Esposito's "Peirce and the Philosophy of History," *Transactions of the Charles S. Peirce Society*. Spring, 1983; XIX: 155-166. Rather, his main interest was in drawing the history of philosophy. He did attempt to write systematically about this, as in his 1901 essay, "On the Logic of Drawing History from Ancient Documents, Especially From Testimonies," in which he criticizes the historians of his day, articulates his theory of historiography, and gives a long example of how this method works.

community, not of an individual, since the community can together perform a greater induction; since it is the work of a community, it naturally involves dialogue which is in turn productive of new understanding; and historians must be fallibilists and open to unanticipated novelties. For Peirce, history is evolutionary. History is not dialectical if by dialectic we mean a necessary or merely mechanical and therefore predetermined progression. History's logic includes the logic of spontaneous and not wholly predictable growth.

Peirce's logic of history developed partly as a reaction to those historians who mistook their opinions for necessary conclusions, and who misunderstood the logic of probability. Historians can and should produce deductions, but only after having looked at the available evidence and formulated testable hypotheses. Generalizations about what is and is not likely to have happened should always be hypotheses, not conclusions, since probability applies not to concrete events but only to generalities. It may be unlikely that a certain event shall happen, but that fact alone tells us nothing about whether or not it actually did happen. In order to determine what did happen in the past, it is necessary to examine evidence, often in the form of testimony, and –as much as possible—without bias. It is a corollary of tychism that prodigies may occur. This then is the logical basis for fallibilism and communal inquiry: fallibilism follows from tychism; and a community of inquiry yields a greater body of material for examination.

### **Historical development as the key to understanding thought**

One of the enduring themes in Peirce's work is the importance of development. We know a thing best when we know not just how it appears at one time—even in its

maturity—but when we know the story of its growth.<sup>81</sup> There is an illustration of this in some of the drafts of the preface to his 1892 Lowell Lectures in the History of Science.<sup>82</sup>

[William] Whewell's theory [in his two books *History of the Inductive Sciences* and *Philosophy of the Inductive Sciences*] in its general statement is that to make a scientific discovery two things are needful, 1<sup>st</sup>, *facts*, drawn from without, and 2<sup>nd</sup>, *ideas*, drawn from within, appropriate to the interpretation of those facts.

Another thing we must answer, 'What is the mode of origination of these appropriate ideas.' Whewell would say they spring from the nature of the mind. But the nature of the mind is something itself due to an evolutionary process; and we want to know just how these ideas came to be implanted in the nature of the mind. Besides, these ideas have most of them grown up during the course of scientific history, and we want to know just how they have grown up and under what general agency.

One of the great questions of the day in biology is whether acquired characters are ever transmitted. If we speak of acquired mental and moral qualities, it is the

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<sup>81</sup> A good illustration of this is found in the way Peirce thinks about the relationship between the meaning of a word and its etymology, a theme I will develop in chapter 4 on Peirce's reading of Plato's *Cratylus*.

<sup>82</sup> I am here and in subsequent pages drawing on Peirce's writings on the history of science to illustrate Peirce's view of history and of the proper methods of historiography. I should mention that at least one Peirce scholar disagrees with this approach to understanding Peirce on history. Philip P. Wiener has argued that "Peirce's philosophy of science and metaphysics was more intimately linked to his logical studies than to his historical interests, that he wrote much more on the logic of science than on its history, and that he minimized the logical strength of historical explanation and yet used it in his metaphysical evolutionism inconsistently." ("W.M. Miller on Peirce's Interpretation of the History of Science," *Transactions of the Charles S. Peirce Society*. Fall 1971; 7. p. 233.) If my citations from Peirce are not a convincing rejoinder to Wiener's view, then Miller provides, I think, an adequate reply to Wiener in his subsequent article. I will add only that Wiener seems to be relying on too narrow an understanding of "history," and is creating an unnecessary and un-Peircean distinction between our knowledge of science and our knowledge of the history of science.

question of whether training is of any use except to the individual. Whether, for instance, the conception of space is a pure result of breeding, that is, of the survival of those who possessed it clearly at birth, or whether it is in some measure the result of the inheritance of the intellectual earnings of our forefathers. No *direct* investigation can afford a satisfactory answer to this question. It can only be resolved by studying out the general *modus operandi* of intellectual development....

One thing, as it seems to me, the history of science renders abundantly clear, it is that man's nature, or natural and apparently innate ideas, are in the early stages of intellectual development.

For that which I have had at heart throughout my studies has been to gain an understanding of the whole logic of every path to the truth.<sup>83</sup>

Here he lays out his main points for the whole series of lectures: to Peirce it is evident that the mind is evolutionary. And not only the mind; ideas themselves are evolutionary. Even history and science themselves may be said to have grown.<sup>84</sup>

The question of whether training is of any use to the individual is like the questions that drive Plato's dialogue, *Meno*, concerning the nature of *arété* and whether it can be acquired. Peirce asks this collectively: can human cultures develop our knowledge and pass it on profitably to another generation? The question is then no longer one of

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<sup>83</sup> *HP* 144-5. (*MSS* 1274, 1272.)

<sup>84</sup> I will have more to say about this in chapter five when I discuss Peirce's claim that even logic and time are the products of evolution.



mere theory, but it has been made to apply to the conduct of life. Can our studies make us better? It is obvious that there is room for improvement: we are only “in the early stages of intellectual development.” The question cannot be answered by “direct investigation.” We cannot answer the question definitively by observing a limited set of contemporary cases. It can only be answered by the broadest sort of inductive research into the general mode by which intellectual development occurs. That is, it requires us to do historical research, to observe the past to see what *might be* in the future.

Peirce takes as his hypothesis the notion that minds and their ideas, history and science, *do* grow. Peirce’s critique of Whewell is like his critique of Henry James, Sr.: both Whewell and James make appeals to general innate ideas without giving an account of those ideas. The ideas are not themselves problematic; indeed they are attractive and they represent a likely account of human knowledge. But any such account needs to be argued for, and cannot be simply and dogmatically posited if it is to have the character of science or philosophy. Peirce then takes on, both in the Lowell Lectures and in his subsequent thought, the challenge of developing a logic of this growth, one that can account for both spontaneous innovation and generality.

## **The Theme of Development in Peirce’s Autobiographical Writings**

Peirce also seems to have understood his own thought in evolutionary terms. Often he prefaced his works with autobiographical accounts of his intellectual history in which he presented his thought to others as the product of a long development.<sup>85</sup> These

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<sup>85</sup> Ken Ketner has made so much of this as to write a biography of Peirce in autobiographical form, *His Glassy Essence*, relying chiefly on Peirce’s own writings for the text.

autobiographical fragments serve the purpose of providing an example of how Peirce viewed the history of philosophy: great ideas are not the results and sole property of individual genius; nor are they only transmitted and acquired in discrete packages. Rather, ideas spread throughout an environment of inquiry; and they do so synechistically<sup>86</sup> and tychistically. By “synechistically” I mean that they spread not just as verbal propositions but as felt consequences of the environment in which they grow; and the continuity of their spread indicates that they are real factors in a given environment, not mere names for individual noetic events or processes. By “tychistically” I mean that they do not arise of necessity through a clearly identifiable dialectic or reaction, but may arise spontaneously and as novelties, in accordance with a general but elastic principle. In other words, they arise in a sort of conversation or dialogue. That dialogue may include both living and historical interlocutors.

In his 1892 *Monist* essay, “The Law of Mind,” Peirce states that “There is but one law of mind, namely, that ideas tend to spread continuously and to affect certain others which stand to them in a peculiar relation of affectability. In this spreading they lose intensity, and especially the power of affecting others, but gain generality and become welded with other ideas.”<sup>87</sup> He calls this law the law of “synechism.” Later in this series of essays written for the *Monist*, Peirce claimed that “a person is only a particular kind of general idea.”<sup>88</sup> It would seem to follow from this that, especially with regard to their ideas, persons are affected by others in their community. This in turn would seem to imply that a person’s ideas do not arise with the force of dialectical necessity nor through

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<sup>86</sup> I will discuss Peirce’s notion of synechism briefly below and in more detail in chapter three.

<sup>87</sup> *EP I*, 313. *Monist* 2 (July 1892): 533-59.

<sup>88</sup> *EP I*, 350. “Man’s Glassy Essence.” *Monist* 3 (October 1892): 1-22.

a spontaneous appropriation or genius,<sup>89</sup> but rather through a complex variety of environmental factors. Furthermore, it is implied that ideas do not pass from person to person intact, but that they undergo mutation—at least a diminution of intensity combined with an increase in generality—as they spread.

Peirce argued that several classes of evidence could be brought up in support of this theory. These include the growth of language (which I will discuss in chapter four) and simultaneous identical discoveries. In his 1893 *Monist* article, “Evolutionary Love,” Peirce wrote,

How many times have men now in middle life seen great discoveries made independently and almost simultaneously! The first instance I remember was the prediction of a planet exterior to Uranus by Leverrier and Adams. One hardly knows to whom the principle of the conservation of energy ought to be attributed, although it may reasonably be considered as the greatest discovery science has ever made. The mechanical theory of heat was set forth by Rankine and by Clausius during the same month of February 1850; and there are eminent men who attribute this great step to Thompson.<sup>90</sup>

Peirce continues in the same vein for some length. His point is that these simultaneous discoveries happen with such frequency as to indicate that ideas are real, and have real effects in the world as they spread.

In “The Law of Mind,” Peirce argues that this synechism must be understood in evolutionary terms. Perhaps in order to introduce his theory with an illustration, he

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<sup>89</sup> Peirce devoted considerable time in his earlier years to an analysis of both dialectical necessity and genius. Both held an attraction for him: dialectic for its attempt to articulate a logic of relations, genius for its novelty or spontaneity. But both also were too limited in scope, and neither could account for the insight of the other.

<sup>90</sup> *EP I*, 370.

begins the essay with an intellectual autobiography. In it he suggests how some of his present ideas might have come to be his. He does not claim to be a necessary product of his environment, nor does he claim to know the exact way in which he might have come to be influenced by ideas in his environment. Rather, like a field researcher or a scientist in a lab, he simply notes potentially significant environmental factors that probably should not be overlooked. At the beginning of the essay he refers to an earlier essay in the series, "The Architecture of Theories,"<sup>91</sup> in which he argued for objective idealism, chance (tychism), and continuity (synechism). Concerning that essay he says

I have begun by showing that tychism must give birth to an evolutionary cosmology, in which all the regularities of nature and of mind are regarded as products of growth, and to a Schelling-fashioned idealism which holds matter to be mere specialized and partially deadened mind. I may mention, for the benefit of those who are curious in studying mental biographies, that I was born and reared in the neighborhood of Concord -- I mean in Cambridge -- at the time when Emerson, Hedge, and their friends were disseminating the ideas that they had caught from Schelling, and Schelling from Plotinus, from Boehm, or from God knows what minds stricken with the monstrous mysticism of the East. But the atmosphere of Cambridge held many an antiseptic against Concord transcendentalism; and I am not conscious of having contracted any of that virus. Nevertheless, it is probable that some cultured bacilli, some benignant form of the disease was implanted in my soul, unawares, and that now, after long incubation,

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<sup>91</sup> *EP I*, 285ff. *Monist* 1 (January 1891): 161-76.

it comes to the surface, modified by mathematical conceptions and by training in physical investigations.<sup>92</sup>

It seems unlikely that this is, as he says, a mere courtesy to those who are enthusiasts of intellectual biography. Its occurrence at the beginning of an essay about the continuity of ideas is no accident. He gives both geographical and historical examples of the synechistic and vital diffusion of ideas to show how they spread. His mention of Concord and Cambridge seems to illustrate that the borders between the two towns are permeable and vague, too porous to keep ideas from passing. His insistence on the reality of ideas combined with his tracing of his own ideas through a long string of Platonists and modified by laboratory training is a case in point, not merely a whimsical excursus. Nor is this an isolated example of Peirce writing autobiographically as an introduction to and an exposition of his ideas.<sup>93</sup> In 1897 he wrote an introduction to a book<sup>94</sup> in which he stated that

The reader has a right to know how the author's opinions were formed. Not, of course, that he is expected to accept any conclusions which are not borne out by argument. But in discussions of extreme difficulty, like these, when good

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<sup>92</sup> MS 6.102.

<sup>93</sup> The Robin catalogue has an entire section devoted to Peirce's autobiographical references, and lists all the following MSS as containing autobiographical sketches: 310, 319-325, 619, 630-632, 645, 657, 687-689, 694, 764, 771, 842, 847-848, 1578-1583, 1601-1644. These more than 50 sketches date from as early as 1860, though the bulk of those that are dated are from after 1890.

<sup>94</sup> It is not clear what book (or books) this was intended to preface. The sections I cite here (CP 1.3, 12, 14) are listed as fragments in the *Collected Papers*, and are from around 1897. (MS 867 published in entirety as CP 1.3-7; MS 865 published in part as CP 1.8-14.) A footnote in the CP identifies these as prefaces to a book. They have been published, both in the *Collected Papers*, and in Buchler's edition of Peirce's works, *Philosophical Writings of Peirce* (NY: Dover, 1940) as a single account (CP 1-14), along with a section from Peirce's 1888 "A Guess at the Riddle." Many of the ideas in this last piece came to light in the *Monist* series.

judgment is a factor, and pure ratiocination is not everything, it is prudent to take every element into consideration.<sup>95</sup>

The subsequent paragraphs recount his intellectual development over the previous forty years. A similar account, written at around the same time concludes on an evolutionary note: ideas grow and ripen, and are never final, but must be part of the continuing intellectual development of humankind. He offers his own intellectual development as an example: he can easily identify the ways in which his thought has grown in dialogue with great thinkers of the past. Each book he has read, and each experiment he has performed, has added to his thought. The additions have not been merely cumulative, however, but have taken the character of adaptive growth. Knowledge is not mere information or accumulation of sense data, but is the development of ideas in conversation and experience. Since knowledge does not accumulate or develop in a predictable or observable pattern of dialectical necessity, the ultimate judgment of ideas will not be found in their present state but in the unfolding of history. In short, ideas can only be judged by their consequences, and only in the degree to which the consequences themselves are fully known.

The development of my ideas has been the industry of thirty years. I did not know as I ever should get to publish them, their ripening seemed so slow. But the harvest time has come, at last, and to me that harvest seems a wild one, but of

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<sup>95</sup> CP 1.3

course it is not I who have to pass judgment. It is not quite you, either, individual reader; it is experience and history....

Indeed, out of a contrite fallibilism, combined with a high faith in the reality of knowledge, and an intense desire to find things out, all my philosophy has always seemed to me to grow. . . .<sup>96</sup>

## **Darwin and the Evolution of Ideas**

The presence of the notions of growth and evolution in Peirce's thought was very likely influenced by Peirce's exposure to nascent Darwinism in his youth. Darwin's *Origin of Species* was published in 1859, during Peirce's Harvard years, and from that point on the idea of growth and evolution played an increasingly important role in his thought. In his 1903 Harvard lecture on "Phenomenology," Peirce recalled a conversation he had with Chauncey Wright in 1860, concerning Darwin's ideas.<sup>97</sup> Peirce had been "away surveying in the wilds of Louisiana when Darwin's great work appeared, and though I learned by letters of the immense sensation it had created, I did not return until early in the following summer when I found Wright all enthusiasm for Darwin."

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<sup>96</sup> CP 1.12, 14.

<sup>97</sup> The following citations are from *Pragmatism as a Principle and Method of Right Thinking: The 1903 Harvard Lectures on Pragmatism*. Patricia Ann Turrissi, ed. Albany: SUNY Press, 1997. (Also found at EP II, 158)

Peirce commented to Wright, a follower of John Stuart Mill,<sup>98</sup> that “Darwin’s ideas of development have more vitality by far than any of your other favorite conceptions.” Peirce added in his reflection on the importance of evolutionary thought, “All nature abounds in proofs of other influences than merely mechanical action, even in the physical world.” This idea eventually permeated the whole of Peirce’s thinking. The world is not merely populated with monads or atoms or even mere “Boscovichian points”<sup>99</sup> but with complex and interdependent growing things. In William Pencak’s words, “history does not ‘evolve,’ it erupts—suddenly transforming itself under the pressure of surprising events.”<sup>100</sup> Pencak’s point is that history, according to Peirce, does not evolve mechanically, but in a fashion that is marked by novelty and fortuitous events. These events nonetheless are related to and grow out of other events, with increasing generality and regularity, though never in a wholly predictable pattern.

Peirce went further than Darwin in extending evolution beyond biological life to every real thing. There is no material thing but has its history of growth, development, and interaction. And ideas never come to us simply and detachedly. Peirce wrote in November of 1860, “I have come to the conclusion that our primary conceptions are not simple but complex; that our elementary conceptions are not independent but linked complexedly together; that nevertheless properly speaking we have no *a priori* synthetical propositions, and that axioms are only definitions.”<sup>101</sup>

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<sup>98</sup> “[Wright] had been at first a Hamiltonian but had early passed over into the warmest advocacy of the nominalism of John Stuart Mill. ...[Wright admired Darwin in part because Darwin’s] doctrines appeared to him as a sort of supplement to those of Mill.” *EP II*, 158.

<sup>99</sup> *Cf.* “Philosophy and the Conduct of Life,” in *EP II*, 35 and n.25, p 506.

<sup>100</sup> Pencak, William. “Charles Sanders Peirce, Historian and Semiotician.” *Semiotica*. 83-3/4 (1991), p. 311.

<sup>101</sup> *MS 891.IV*, 25 November 1860.



Eventually he came to think of the history of philosophy in similar terms: we should think of philosophy not in terms of isolated or fixed doctrines, but as an ongoing dialogue and development of human thought. However, this was not always his view. Rather, he came to this view over time.<sup>102</sup> His reading of the history of philosophy illustrates this development nicely and in a double fashion: the more he read in the history of philosophy, the more he engaged in conversation with it. For instance, his reading of Plato shows the change in his method of reading the history of philosophy; and his conversation with Plato, through the course of this reading, helped Peirce work out just how one should read the history of philosophy.

We might ask whether Peirce's autobiographies contradict his statement in the Lowell Lectures that we cannot discover the development of ideas by direct investigation. If Peirce intended his autobiographies as proofs of the spread and growth of ideas, then it would be a contradiction. But it seems rather to be the case that Peirce used his own intellectual development as a laboratory study from which to form hypotheses. These hypotheses could then be offered to a broader community of inquiry for evaluation

## **Radical genius, “representative men,” and evolution**

In a somewhat Emersonian fashion, Peirce held that certain men wind up being the representatives of thought in their age.<sup>103</sup> As William Pencak puts it, “great men do make a difference, men who cannot possibly be considered ‘products’ of ‘forces.’...these

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<sup>102</sup> Cf. Fisch in “Peirce’s Arisbe” on Peirce’s somewhat late appropriation of Darwin and application of Darwin to the growth of ideas. Also, Gérard Deledalle in *Charles S. Peirce: An Intellectual Biography*. Amsterdam and Philadelphia: John Benjamins Publishing Co., 1990. p. 43. Also, this theme of the growth of Peirce’s thought will be illustrated below and in the next chapter in the discussion of his changing view of Plato. Finally, see his changing views of Prantl, Cudworth, Zeller, Lutoslawski, Windelband, Falkenberg, Bascom, Burt, et al.

<sup>103</sup> Cf. D. R. Anderson, “Peirce and Representative Persons,” in *Philosophy in Experience: American Philosophy in Transition*. Richard E. Hart and Douglas R. Anderson, Eds. New York: Fordham U. P., 1997. (77-90.)

men do in fact shape history, *to the extent that* they wholeheartedly and unselfishly dedicate themselves to a higher ideal.”<sup>104</sup> Peirce did believe in genius, but not in radical genius. These great men from whom come ideas that change history, are not wholly determined by external forces (i.e. not “‘products’ of ‘forces’”). Nor are they wholly independent of their environment. Rather, their genius has partly to do with the general ideas that form their environment, partly to do with self-controlled self-preparation for insight by dedication to an ideal, and partly to do with fortune or tychism. For Peirce, we are in thought, not vice versa. Ideas have reality and are a real part of our environment. Bearing this in mind will help explain the Platonistic strain in Peirce explored in the next chapter, and it will also help to illustrate the reality that Peirce eventually ascribed to (Platonic) Ideas as firsts and thirds. This also gives insight into the two conceptions of historiography that Peirce opposes. On the one hand, Peirce opposes the view that all of history can be explained in terms of dialectical necessity. This smacks too much of mechanism and leaves no room for spontaneity or creativity. On the other hand, Peirce opposes the skeptical view that novel ideas are wholly the product of the thought of individuals. In charting a method of historiography, Peirce was attempting to navigate the narrow course between these two biases. Historians like Cudworth, Prantl, Windelband, Zeller, and Lutoslawski all arrogated to themselves the privilege of deciding what seemed too unlikely to have happened in the past. I will say more on this later in the chapter.

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<sup>104</sup> Pencak, *ibid.*

## The Development of Peirce's View of Philosophical Historiography

### Fisch on Peirce's work with Allan Marquand: Why Peirce became a philologist.

Max Fisch, in his essay "Peirce's Arisbe," explains how Peirce came to think of the history of philosophy as an important discipline. In the early 1880s, Peirce was working with his only doctoral student, Allan Marquand.

Marquand undertook for his thesis to translate the Greek text [of Philodemus' Epicurean *Peri semeion kai semeioseon*] and to elucidate it in an introductory essay on "The Logic of the Epicureans."<sup>105</sup> Peirce worked through Philodemus along with Marquand. In the spring of 1880, while writing the essay, Marquand was also teaching an advanced course on Mill's *Logic*. He and Peirce concluded that Philodemus' treatise contained a well-developed theory of induction, and that it was about on a level with that of Mill. Until then, Peirce had supposed, on good authority, that the Greeks had no theory of induction, just as they had no theory of probability; that these were modern inventions. If Prantl and the other historians of logic and of philosophy could be so far wrong, the only thing for it was to be one's own philologist and historian of Greek philosophy....He was not

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<sup>105</sup> For more on this topic of Peirce's study of Philodemus with Marquand and its relevance for Peirce's semeiotic, cf. Gérard Deledalle, "Semeiotic and Greek Logic: Peirce and Philodemus." Deledalle, Gérard. *Charles S. Peirce's Philosophy of Signs: Essays in Comparative Semiotics*. Bloomington and Indianapolis: Indiana University Press, 2000. pp. 78-86

unprepared; his teachers of Greek, as of Latin—Sophocles, Felton, Goodwin, Chase, Lane—had been of the best.<sup>106</sup>

Until this point, Peirce had largely relied on the historians of philosophy as sources of information about the ancients. This is not to say that he did not read the ancients. His training in the classics was excellent, and he was already fairly well-read. But when it came to logic and science, he tended to look to modern logicians to summarize the views of the ancients for him. His work with Marquand on Philodemus engendered deep dissatisfaction with Prantl as an historian, and opened his eyes to the possibility that he had missed much of what was important in the ancient philosophers. His return to the original texts of ancient philosophy soon made an impact on his thinking. Philodemus' theory of chance (or Epicurean "swerve") provided both a way to begin to think about tychism and a spur to seek other treatments of chance in the ancients, a search that led him eventually to Aristotle's.

Soon thereafter, Peirce signed on with the *Century Dictionary* and was assigned to write definitions of logical, scientific, and philosophical terms. After his experience with Prantl, he found himself more frequently returning to the ancient texts rather than to the modern commentators and logicians for his definitions. His definitions often followed the usage of a word from its earliest times to the present to explain how it has been used, not merely how it is used. In particular, his attempt to define the term "continuity" gave him pause: "Continuity has never yet been defined," he wrote, "Kant's definition [of continuity], to which I am ashamed to say I have hitherto given my

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<sup>106</sup> Fisch, 1986. (230.)

adhesion, is ridiculous when you come to think of it.”<sup>107</sup> This also sent him back to Aristotle to seek a clearer definition.<sup>108</sup>

Peirce expanded his reading of Aristotle beyond the *Organon* and *Metaphysics*, the only books in Aristotle that he had read so far.<sup>109</sup> And as he re-read the *Organon* he was impressed with the beginnings of modal logic he saw in, for instance, the “sea-battle” problem in *De Interpretatione*.<sup>110</sup> It is logically true that a given event, say, a sea-battle, either will occur tomorrow, or it will not. Yet it is not true that it will certainly happen nor that it will certainly not happen; as long as it remains a future event, it has real potential either to occur or not to occur.

Nominalists uniformly speak of Aristotle's view of future contingents as really absurd. It may be so; but it is certainly the only doctrine which their principles leave room for. A certain event either will happen or it will not. There is nothing now in existence to constitute the truth of its being about to happen, or of its being about not to happen, unless it be certain circumstances to which only a law or uniformity can lend efficacy. But that law or uniformity, the nominalists say, has no real being; it is only a mental representation. If so, neither the being about to happen nor the being about not to happen has any reality at present; and the most that we can say is that the disjunction is true, but neither of the alternatives. If, however, we admit that the law has a real being, not of the mode of being of an

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<sup>107</sup> MS 278.

<sup>108</sup> Cf. CP 3.569, 4.122, 4.171, and 6.168. Peirce said that Kant “confuses continuity with infinite divisibility” (3.569). Peirce’s view was that continua should be thought of in terms of a logic of relatives. The point is not to think of continua as infinitely divisible into parts, but to determine how all the “parts” first came to be “welded together” (6.168).

<sup>109</sup> Cf. MS 606.25 and Fisch, 1986, p.232.

<sup>110</sup> Aristotle, *De Interpretatione*, 9 (19a30-34).

individual, but even more real, than the future necessary consequent of a present state of things is as real and true as that present state of things itself.<sup>111</sup>

Aristotle's logic of future contingents was not well developed, but, as he had found years earlier in his reading of Ockham and Duns Scotus, he now discovered that he had more in common with some of the ancients than with most of his contemporaries. Early in the first of his Lowell Lectures Peirce criticized theologians who should have been his allies in the fight against mechanical necessitarianism, calling them "dastards" and "cowards" who "had not even the courage to try the experiment" of praying to see if God would respond with rain, thereby showing that the course of the cosmos is not entirely determined by mechanical forces. "Why? Because they believed so strongly in mechanical necessity, that they thought it wiser to let religion go discredited than to set it up to fight the laws of nature." But those laws of nature, Peirce was coming to believe, are subject to change and growth, and plastic enough to admit possibility. In fact, if the laws could be shown to be real, then any possibility that hinges on them would have to be just as real. The problem was getting past the nominalism that only allowed the reality of existent things. There was a parallel to this nominalism in historiography, in which only those testimonies which match actual states of affairs, or which conform to an established and rigid law, could be admitted. Since that law to which they conform did not, on the nominalist account, have any real being but was only the product of the imagination of the historian, historians could only admit those events which seemed to them to be likely. Any testimonies which did not conform to their concept of likelihood were to be

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<sup>111</sup> CP 6.368.

dismissed. The result was an impoverished view of history. The advantage of this view of history was that whatever was admitted would be likely to be admitted by all. The disadvantage of it was that “all” in the previous sentence could only mean those whose experiences and judgments were similar to those of the historian. People from another time and place might have a different view altogether, but this view could not easily be admitted by the historian. Historiography thus excluded from its purview an enormous amount of data, from which much could be learned. Peirce criticized these historians from the point of view of personal experience. His earlier reading of Aristotle’s grapplings with contingencies had been through the lens of Peirce’s early nominalism. Like the nominalists, he had viewed ancient logicians as “childishly naïve.” Now that he had begun to pay serious attention to the ancients, Peirce derided his own early reading of them as “childish naïveté.”

To this first consideration, it is necessary to add, in the second place, that of the great difference in the logical status of the future and the past, which Aristotle stated with great emphasis without finding anybody in modern times to comprehend what he said, not even Trendelenburg, who comes the nearest to it. Aristotle is understood by modern critics to be in a *childishly naïve* state of mind on this subject. Now it is quite true that Aristotle was almost the first pioneer in logic and just stood at its threshold. It is also true that there are some monumental follies in his physical books; but the worst of these may fairly be presumed to be insertions made by different students during the thirty years when his manuscripts lay on the shelves of his school for general use. But Aristotle was by many

lengths the greatest intellect that human history has to show; and it was precisely in such fields of thought, as this distinction of past and future time, that his mind was the most thoroughly trained. So gigantic is his power of thought that those critics may almost be excused who hold it to be impossible that all of the books that have come down to us as his should all have been produced by one man. *I am ashamed to have to confess that I shared the general opinion of Aristotle's childish naïveté in those passages, until the further progress of my own studies forced me to the very substance of what Aristotle says.* The past is ended and done; the future is endless and can never have been done.<sup>112</sup>

In 1909 he commented similarly about his reading of Plato, that when he was younger he “had read a little of Plato but had quite failed to appreciate the logical importance of the Dialogues.”<sup>113</sup> Peirce had allowed himself to be misled by leaning too heavily on his contemporaries to tell him what the ancients had believed.

If Prantl and the other historians of philosophy had been mistaken about ancient logic, others were sure to be mistaken as well. Peirce’s reviews of Zeller, Windelband, and Lutoslawski<sup>114</sup> over the next two decades show an increasingly sharp criticism of what he saw as the nominalistic prejudices and logical errors of historians of philosophy. Zeller in particular drew Peirce’s wrath in the 1892-3 Lowell lectures for his unwillingness to admit as historical anything he found to be unlikely. Zeller, according to Peirce, was a nominalist and a necessitarian because he was unwilling to admit the

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<sup>112</sup> CP 6.96, italics mine.

<sup>113</sup> CSP to Samuel Barnett, cited in Meyers, Robert G. and Popkin, Richard H., “Early Influences on Peirce: A Letter to Samuel Barnett,” in the *Journal of the History of Philosophy*. 31(4); 619.

<sup>114</sup> I discuss Zeller here, Windelband in the next section, and Lutoslawski in a later chapter.



reality of possibility. If there is no possibility, then all that is must be necessarily. Zeller apparently took this to include his own actual “conclusions.” Peirce’s first remark about Zeller in the Lowell Lectures<sup>115</sup> was this:

Zeller, the well-known historian of Philosophy, adapts rules of evidence, which seem to me very illogical, who excludes all testimony which does not conform to certain artificial conditions, the result of which is chiefly to cause him to omit facts of history, which a more intelligent investigation would regard as sufficiently probable to be admitted into the narrative. What Zeller admits will generally be incontestable.... Zeller violates his own canons when he says there is *no doubt* [concerning a given historical event]. But an examination of the cases in which Zeller uses the word ‘doubtless’ *zweifellos* shows that he applies [it] not where no doubt is *possible*, but where he accepts a proposition without any evidence, or what *he* considers such.<sup>116</sup>

Peirce’s attack on Zeller goes on for several manuscript pages, and even still Peirce suggests that he is holding back his worst vitriol lest he appear as ungentlemanly as does Zeller.<sup>117</sup> Evidence and testimony can expand the community of inquiry; but Zeller prejudicially excludes certain testimony and thereby certain inquirers from that community. Peirce frequently cites Zeller’s view of Thales as an example of this.<sup>118</sup> In Plato’s *Theaetetus*,<sup>119</sup> it is related that Thales fell into an open well one night while

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<sup>115</sup> More than three-quarters of these lectures deal with ancient science.

<sup>116</sup> *HP* 167.

<sup>117</sup> *HP* 169.

<sup>118</sup> *Cf. CP* 7.176.

<sup>119</sup> Plato, *Theaetetus*, 174A.

gazing at the stars. Zeller finds it unlikely that anyone as intelligent as Thales could fall down a well, and so he claims that the story is false. Peirce writes

Now scientific logic cannot approve that historical method which leads to the absolute and confident denial of all the positive testimony that is extant, the moment that testimony deviates from the preconceived ideas of the historian. The story about Thales falling into the ditch while pointing out the different stars to the old woman is told by Plato about two centuries later. But Dr. Edouard Zeller says he knows better, and pronounces the occurrence quite impossible. Were you to point out that the anecdote only attributes to Thales a character common to almost all mathematicians, this would afford him a new opportunity of applying his favorite argument of objection, that the story is "too probable." So the assertion of half a dozen classical writers that Democritus was always laughing and Heraclitus always weeping "proclaims itself," says Zeller, "an idle fabrication," notwithstanding the supports it receives from the fragments. Even Zeller admits that Diogenes of Sinope was a trifle eccentric. Being a contemporary of Aristotle and one of the best-known men of Greece, his history cannot well be denied even by Zeller, who has to content himself with averring that the stories are "grossly exaggerated." There was no other philosopher whose conduct according to all testimony was quite so extravagant as that of Pyrrho. The accounts of him seem to come direct from a writing of his devoted pupil, Timon of Phlius, and some of our authorities, of whom there are a dozen, profess to use this book. Yet Zeller and the critics do not believe them; and Brandis objects that the citizens of Elis would not have chosen a half-insane man high priest -- as if

symptoms of that kind would not have particularly recommended him for a divine office.<sup>120</sup>

The upshot of this is that in his rejection of the story about Thales, Zeller thinks Plato's veracity as an author is circumstantially impugned. In Peirce's view, it is Zeller who is impugned by his own prejudice. To Zeller's detriment, his absolute preference for his own judgment isolates him from what he might learn from a more broadly construed community. Zeller makes at least two errors: he denies possibility and he misunderstands the nature of induction. The latter error comprises two errors: he misunderstands probability and he thinks that induction leads to necessary conclusions. By attempting to avoid what he thinks are improbable accounts by early historians, he winds up proposing unlikely and dogmatic accounts, and lapses into a sort of historian's solipsism.

### **Peirce's reviews of the History of Philosophy in *The Nation*.**

Soon after reading Philodemus with Marquand, Peirce began reading histories of ancient philosophy and reviewing them for *The Nation*. In these reviews it becomes clear that what is lacking in Peirce's contemporaries is a good understanding of the logic of history. Peirce was not to articulate his logic of history positively and completely until his 1901 essay, "On the Logic of Drawing History From Ancient Documents, Especially From Testimonies." However, here and in similar places he began to do so, largely negatively (i.e. by attacking the logical errors of the historians he reviewed) but occasionally positively, as in the passage just cited, Peirce begins to articulate it. Here, in the reviews for the *Nation* he articulates three key points: first, history is an inductive science, not mere reporting. From this it follows that all testimonies must be considered,

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<sup>120</sup> CP 1.617. Cf. CP 1.86 and 7.176.

and not just those that seem most attractive or that best fit preconceived notions. Second, history is not primarily important as a record of political decisions but as a record of the development of thought. Third, it is far less important to know current metaphysical doctrines than it is to know the history of metaphysics. This is because metaphysical doctrine without argumentation is dogma. The chief argumentation that can be given for metaphysical doctrine is the history of human thought. In that case, the history of metaphysical doctrine is far more revelatory of the development of human thought than it is of metaphysics proper. As we have already seen, knowledge of the development of human thought is important because it is the only way to investigate how we might positively influence our own lives and the well-being of our species. In other words, the history of philosophy is directly relevant for the conduct of life, by an examination of consequences of doctrines. Human thought and its history can—and ought to—be read as signs. Peirce developed his view of the relationship between thought and the cosmos from that of his father, the mathematician Benjamin Peirce. As Joseph Brent puts it, “Benjamin Peirce taught mathematics as a kind of Pythagorean prayer. He proclaimed the mystical doctrine that, however the supernatural might be, it existed in the natural world and was experienced there.”<sup>121</sup> The elder Peirce took the discovery of ideal realities disclosed in mathematical investigations to be a sort of mystical communion with the cosmos. Mathematics was, for Benjamin Peirce, a mystical endeavor that offered insight into the nature of things, and especially the insight that all things are ideally connected. In 1889, Charles Peirce called his father’s view (which had become his own) “ideal-realism,” and he described it as “the opinion that nature and the mind

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<sup>121</sup> Joseph Brent, *Charles Sanders Peirce, A Life*. Bloomington and Indianapolis: Indiana University Press, 1993, p. 33.

have such a community as to impart to our guesses a tendency toward the truth, while at the same time they require the confirmation of empirical evidence.”<sup>122</sup> All thought is a sign of the cosmos, and even guesses are signs, though their meaning must be worked out and tested empirically, by the community of inquirers.

The first of Peirce’s reviews in *The Nation*,<sup>123</sup> in 1894, is especially important. In it Peirce reviews four histories of philosophy.<sup>124</sup> He prefaces his remarks on these four books by making three important claims about the importance of the history of philosophy:

If history is to be conceived neither as mere narration nor as the study of obsolete politics, but as *an account of man’s development*, then *the history of the mind is surely the main thing, and that of thought must stand at its head*....Certainly of no natural science can it be said, as might very well be maintained of metaphysical philosophy, that *its history is of more consequence than its doctrine*.<sup>125</sup>

First, history is not an inert report but is the account of human development. This is a repetition of the theme with which he introduced the Lowell lectures. The study of the history of philosophy provides us with our best means of studying our own development and therefore of improving our own self-understanding. Second, the history of philosophy (*i.e.* the history of thought) is the most important kind of history. Why

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<sup>122</sup> Cited in Brent, *op. cit.*, 205.

<sup>123</sup> The review appeared in two parts. Part I: *Nation*, 59 (27 September 1894) 237-238 (reprinted in *N*, pp. 73-76); Part II: *Nation*, 59 (4 October, 1894) 251-252 (*N*, pp. 76-80).

<sup>124</sup> W. Windelband, *A History of Philosophy: With especial reference to the Formation and Development of its Problems and Conceptions*; Richard Falkenberg, *History of Modern Philosophy*; John Bascom, *An Historical Interpretation of Philosophy*; B. C. Burt, *A History of Modern Philosophy*.

<sup>125</sup> *N*, 73; italics mine.

might this be? Peirce rarely mentions politics in his writings. Perhaps this explains why: a history of politics is the record of past human actions. But actions are events, points in the continuum of time. We only come to understand those events when they can be seen as part of the continuum. They are not united by the particularities of human events and actions, but by the general ideas and principles that unite them. In other words, Peirce's disdain for politics is not tantamount to disdain for ethics or for the political life. Though he may have failed miserably as a political creature, he was nonetheless very interested in the practical, but he saw it through the lens of ideas. Third, by implication, the history of philosophy is a subset of the history of mind. Just what he means by this is not clear. Is the history of philosophy a subset of epistemology? Or does he mean that the history of philosophy is a subset of the history of the development of Mind, where Mind refers not to particular minds but to some sense of the collective thought of humankind? Probably he did mean the latter. Ideas are continuous and not held exclusively by individuals. In some sense, Peirce thought of mind as a shared property. I think it likely that he also meant the former, in which case the history of philosophy is a subset of the history of epistemology. What we know about the development of human thought we know in terms of human knowledge. Fourth, it is more important to know the *history* of philosophy than to know its current *doctrines*. This point is particularly striking, until we remember that knowing doctrines alone is like knowing only our present surroundings. It is only in knowing how those doctrines developed that we can understand their value; they are consequences of a long development, and so they can serve us in the interpretation of the past.

In this review, perhaps most interesting is Peirce's review of a text by W. Windelband. Windelband, reviewing the text of Philodemus mentioned above, translated its title as "On Signs and Designations," and went on to say that Philodemus' work is merely a logical text about the *suppositio* or logical denotation of nouns, such as one might find more completely in a medieval logic text. Peirce was incensed, and in a thinly veiled reference to himself and Marquand, suggested that

Our student, not being blessed with Teutonic phlegm, blushes at this as a snub....stung to the quick by the imputation of unusual ignorance, our ingenious youth rushes to the college library, ...and finds to his amazement that the title cannot, agreeably to the contents, be understood to mean, "On signs [*i.e.*, words and the like] and designations," but, on the contrary, must be rendered "On signs [*i.e.*, facts symptomatic of other facts] and their significance [*i.e.* their inferential value]"; and further that the substance of the treatise bears not the remotest affinity with the "supposition" of nouns, but is a discussion of the philosophy and value of inductive reasoning! In short, he discovers that the superlatively learned Windelband can certainly never have opened the volume of which he talks so glibly.<sup>126</sup>

Five years later, Peirce reviewed Windelband's *History of Ancient Philosophy* for the *Nation*.<sup>127</sup> In this review, Peirce praised Windelband as being one of the few historians of ancient philosophy who did "not plume himself so much on brilliant theories

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<sup>126</sup> N, 74.

<sup>127</sup> N, 246ff.

that set all the *evidence* at defiance as upon giving a clear insight into the *development* of ancient philosophy...”<sup>128</sup> Nonetheless, Peirce found Windelband’s few faults to be not unlike those of Zeller:

The faults of Windelband’s presentation are not trifling; but the worst of them are common to all works that are based on the modern critical treatment of ancient history—the method that has received so many hard knocks from archaeology. In the first place, notwithstanding what has been just said of the *relative* merits of this history, it does not always escape being drawn into the common German fault of discarding all the premises in our possession in favor of what the critic is disposed to think likely. We note one place where this tendency is betrayed by a single word. Speaking of the simple propositions in geometry that the Greeks attributed to Thales, he says: “It may be safely concluded in every instance that these elementary propositions were generally known to the Greeks of his time.” Concluded? A conclusion requires premises; but such premises are altogether in default. Windelband would more accurately have said *guessed*.

In these reviews Peirce corrects the historians on several points of methodology. First, history cannot be treated as a pure discipline. Rather, the historian must attend to empirical science. We never can study pure theory, pure metaphysics, for instance, but we always study theoretical works in some concrete context. Windelband’s method has been shown to be unreliable by modern archaeology, an empirical science. Peirce does

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<sup>128</sup> N, 246; italics mine.



not detail just how this is so, but we might venture some guesses. Critics like Zeller, hoping to make historiography into a science, rejected what they thought unlikely in hopes of gaining respectability for their discipline by excising its conjectural element. This led to the denial of much of what was found in ancient documents. In the late 1800s excavations like Heinrich Schliemann's<sup>129</sup> (1822-1890) in Greece and Turkey and W. M. Ramsay's (1851-1939) in the Levant repeatedly showed empirical evidence that the ancient historians were correct, contrary to the views of 19<sup>th</sup> century 'higher critics.'

Peirce no doubt had in mind the text of Philodemus that he and Marquand had worked on in 1880,<sup>130</sup> and which had been unearthed at Herculaneum in 1752 and published by Theodor Gomperz in 1865. He may also have been thinking of the numerous discoveries by archaeologists like Ramsay that gave the lie to the Tübingen school claims that St. Luke's writings must have been fabrications due to the number of *hapax legomena* in the text. Ramsay showed that all the places and names found only in Luke's two books and unsubstantiated by other historians were in fact substantiated by recent archaeology.<sup>131</sup> If historiography is to have the character of a science, it needs to have an empirical element. Peirce found this in stylometry, or the measurement of frequency of the use of words and phrases which could be keyed to historical events, speakers, and locations. In response to

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<sup>129</sup> Cf. CP 1.113 and 5.597 for Peirce's CP references to Schliemann. He does not mention Ramsay in the CP.

<sup>130</sup> I think it safe to say "no doubt" here since in his earlier review of Windelband, in 1894, he was explicit in his reference to Philodemus. Still, I might be wrong. See N, 74.

<sup>131</sup> Peirce specifically claims *not* to have studied the arguments against the Biblical texts, but he is plainly aware of them and of their importance. Cf. CP 6.513: "But the German critics (I speak only of those who treat of the history of philosophy, for I have never looked into the Biblical criticisms) are as illogical as Hume and in much the same way. Hence, whenever their conclusions have been tested by the spade of the archeologist it has been to their complete discomfiture." Although Peirce denies being a scholar of Biblical literature, nevertheless many of his discussions of history, science, and tychism occur in the context of discussing the miracle-claims of Biblical Judaism and Christianity. At one point, while discussing laws of nature and probability, he goes so far as to say that "there is no difference between natural and supernatural facts in this respect." (CP 1.90).

Windelband's dismissal of the possibility that the *Parmenides*, *Sophistes*, and *Politicus* were written by Plato, Peirce replies, "as for the stylometric proofs, strong as iron, of the authenticity of the three dialogues, they smack so much of archaeology as to put a 'higher critic' quite out of sorts at their mere mention."<sup>132</sup>

Second, Windelband lacks a sense of the logic by which historiography ought to proceed. This is evidenced by his inattentiveness to archaeology, which belies an inattentiveness to the logical methods of the sciences. Like Zeller, Windelband mistakes his hypotheses and generalizations for conclusions; he is inattentive to scientific discoveries; and he misunderstands the nature of probability.<sup>133</sup> Both historians seemed to think "probability" to be synonymous with "likelihood," and "likely" they took to mean "incontestable." Real science does not produce incontestable results. Quite the opposite: the results of scientific theorizing must be open to empirical falsification or refinement. As Peirce says,

History would not have the character of a true science if it were not permissible to hope that further evidences may be forthcoming in the future by which the hypotheses of the critics may be tested. A theory which should be capable of being absolutely demonstrated in its entirety by future events, would be no scientific theory but a mere piece of fortune telling. On the other hand, a theory,

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<sup>132</sup> N, 248.

<sup>133</sup> Peirce's work on the subject of probability and historiography culminates in his "On the Logic of Drawing History From Ancient Documents, Especially From Testimonies." Carolyn Eisele has a good article summarizing Peirce's view: "Probability in Logic and the History of Science," in *Studies in the Scientific and Mathematical Philosophy of Charles S. Peirce*. The Hague: Mouton, 1979, p. 108-114.

which goes beyond what may be verified to any degree of approximation by future discoveries is, in so far, metaphysical gabble.<sup>134</sup>

Third, uncertainty and doubt cannot be avoided in history. This is nothing to be ashamed of. Dismissing evidence is something to be ashamed of, however. The doubt then is real and can lead to real discoveries. Peirce wrote, “The whole history of thought shows that men cannot doubt at pleasure or merely because they find they have no positive reason for the belief they already hold. Reasons concern the man who is coming to believe, not the man who believes already.”<sup>135</sup> He arrived at this view at least partly as a consequence of studying the history of philosophy.

Fourth, tradition and ancient testimony are to be attended to. This does not mean that all that is traditional is true, but that tradition’s voice is a part of the dialogue of history and should not be dismissed prejudicially simply because it is traditional. Our contemporary prejudices might be blind spots rather than the clarifying lenses they sometimes seem to be. Peirce finds that Windelband, “instead of endeavoring to carry the reader back to the naïve thoughts of the ancients, sometimes reports the ancients as expressing opinions about questions of modern philosophy.”<sup>136</sup> We must attempt to read ancient philosophy in such a way that allows us to see the problems the ancients wrestled with *as they saw them*. Peirce claims that he did just this, and that he “pondered upon all the main systems, never being satisfied until I was able to think about them just as their

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<sup>134</sup> CP 5.541. For a discussion of this passage see Willard M. Miller, “Further Thoughts on Peirce’s Use of History,” *Transactions of the Charles S. Peirce Society*, Spring, 1972; 8: 115-122. (esp. p.118ff). This article is the third of three in an exchange between Miller and Philip Wiener on Peirce’s use of history. The other two articles are: Miller, Willard M. “Peirce on the Use of History,” *Transactions of the Charles S. Peirce Society*. Spring, 1971; 8 (2); 105-126.; and Wiener, Philip. “W. M. Miller on Peirce’s Interpretation of the History of Science,” *Transactions of the Charles S. Peirce Society*. Fall 1971; 7: 233-236.

<sup>135</sup> CP 8.45 (Review of Royce’s *Religious Aspect of Philosophy*).

<sup>136</sup> N, 248.

own advocates thought.”<sup>137</sup> The “higher critics” and “German scholars” dismiss ancient testimony by subjecting it to contemporary standards rather than the “naïve” standards by which it was first formulated. Such “scholarship” is really only the bias of the scholar. Peirce frequently returns to the example of the ancient testimony<sup>138</sup> that Pythagoras had a “golden thigh.” Nineteenth century critics (Peirce often has Zeller in mind in this case) dismiss this testimony on the basis of its unlikelihood. That is, it seemed unlikely in the nineteenth century that someone could have a thigh made of solid gold. But, Peirce asks, is this what the ancients meant? It seems Zeller feels compelled to choose between believing all and believing nothing. Since the testimony is difficult to believe, Zeller feels more confident in rejecting it, and in trusting his own account of ancient history than those of the ancients. Peirce writes that

Such were the dicta by means of which the internal criticism of historical documents was carried to such a height that it often amounted to the rejection of all the testimony that has come down to us, and the substitution for it of a dream spun out of the critic's brain. But archeological researches have shown that ancient testimony ought to be trusted in the main, with a small allowance for the changes in the meanings of words. When we are told that Pythagoras had a golden thigh, we are to remember that to the ancients gold did not mean a chemical element of atomic weight 197.5 and specific gravity 19.3, melting at 1045• C. and forming saline compounds of the types AuX and AuX[3]. It meant something of metallic lustre, warmer in color than electrum and cooler than copper. Dr.

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<sup>137</sup> *MS* 1606.3.

<sup>138</sup> *Cf. CP* 1.88 for a list of the ancients Peirce says give testimony to this.

Schliemann's discoveries were the first socdolager<sup>139</sup> that "higher criticism" received. It has since got many others.<sup>140</sup>

Or again,

We may find that such and such a proportion of calves have five legs. But we never can conclude with any probability that the ratio is strictly zero; and even if we knew that the proportion of men with golden thighs is exactly zero, that would be no argument at all against Pythagoras having had a golden thigh. For something might be true of one man, or any number of men, and yet might occur in the long run in a finite number of cases out of an infinite series. Now a finite number divided by infinity is exactly zero. That Pythagoras had a golden thigh is the testimony of history. It is asserted by Aristotle, of all possible authorities the highest, by both Porphyry and Jamblichus after Nicomachus, by Herodotus, by Plutarch, Diogenes Laertius, Aelian, Apollonius, etc. This is far stronger testimony than we have for the resurrection of Jesus.<sup>141</sup>

Since the resurrection is the best-attested and the most strongly believed (and perhaps the most contested) miracle in the Christian Scriptures,<sup>142</sup> Peirce's meaning is quite clear.

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<sup>139</sup> *Sic.* OED: "A heavy or a knock-down blow." Usually spelled "socdollager" or "sockdolager."

<sup>140</sup> *CP* 1.113.

<sup>141</sup> *CP* 1.88.

<sup>142</sup> *Cf. I Corinthians* 3.8, *e.g.* The resurrection is usually asserted by theologians and church historians as the best-attested miracle of the New Testament, being the most important one, on which the weight of all the others is said to hinge. Peirce remarks elsewhere that "The whole of modern 'higher criticism' of

Peirce makes a fifth point that is a counterpoint to the fourth. To write or to read history is to engage in a living dialogue. It is not sufficient, therefore, only to have recourse to histories written long ago or far away. Another of the volumes reviewed here receives especial praise for having been written by an American:

That a history of philosophy ought to be written in the country where it is to be used, is a maxim that gains in weight the more one reflects upon it....Everybody knows that there is a German history of philosophy, admirably translated, that has been of very great usefulness in this country; we mean Morris's *Überweg*. But now that work, more than twenty years old, is growing out of date. Besides, it states only the conclusions of philosophers, not their reasonings, and then, it is written from a foreign point of view. We need an American history of philosophy, upon an encyclopaedic scale.<sup>143</sup>

It's not that Peirce wanted to establish a history of American philosophers, but that he wanted there to be a history of philosophy that avoided the "German" error of stating only fashionable conclusions. Histories of philosophy should provide an account of reasonings. Histories that only provide conclusions give us only doctrines to dialogue with, and all we can do with them is memorize them. But histories that provide an account of the development of those doctrines provide us with opportunities to develop our own thinking in dialogue with others who preceded us, as we observe them working

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ancient history in general, and of Biblical history in particular, is based upon the same logic that is used by Hume." "The whole of modern 'higher criticism' of ancient history in general, and of Biblical history in particular, is based upon the same logic that is used by Hume." (From "The Laws of Nature and Hume's Argument Against Miracles," June 1, 1901. Cited in Philip P. Wiener, *Values in a Universe of Chance*, 1958: New York, pp 292-293.)

<sup>143</sup> *N*, 75-6.

out their own problems. Their problems may no longer be ours, but in watching them address their problems, we can observe as well their method of reasoning. Joseph Brent, one of Peirce's biographers, comments on this:

The most recent, interesting, and useful lesson I learned from Peirce as a historian is that we are practicing semioticians, whether we know it or not. We study the past to find out what happened and what it meant, using the plethora of signs that was left behind....We become deeply involved in a dialogue with our sources; we come to understand the complexity of the interrelationships that always exist between sources and their interpretations. This understanding begins with the collection and initial categorization of materials....As inquiry progresses, thoughtful historians carefully maintain a continuous awareness of the dialogic relationship between ourselves, our sources, and their meaning, called their interpretations. This triadic relation of sign, object, and interpretant Peirce calls *semeiosis*.<sup>144</sup>

This dialogue with the sources is the process of *semeiosis*. Peirce observed that all thought is in fact *semeiosis*, and a dialogue one holds with oneself. This was an insight he gleaned from reading Plato's *Theaetetus*.<sup>145</sup>

## **The Development of Peirce's Reading of Plato**

Around the same time as his conversation with Chauncey Wright, in May of 1860, Peirce wrote up a long list of "metaphysical axioms and syllogisms"<sup>146</sup> that he had

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<sup>144</sup> Joseph Brent, "Pursuing Peirce." Found at <http://members.door.net/arisbe/menu/library/aboutcsp/brent/pursuing.htm#ref44>

<sup>145</sup> I will address this in chapter five.

mined from the texts of Plato. In all, he lists 27 such axioms<sup>147</sup> and several syllogisms formed from them, listed according to the dialogues in which they appear. The list surveys eight dialogues in all: *Apology*, *Phaedo*, *Crito*, *Gorgias*, *Protagoras*, *Phaedrus*, *Theaetetus*, and *Republic*.<sup>148</sup> The list reads like a breviary or instruction manual for understanding Plato's doctrines, and appears to be an attempt to systematize Plato's thought by distilling the logical portion of it out of the more literary dialogues. Many of Peirce's later ideas are present in germinal form here, including his Pragmatic Maxim,<sup>149</sup> the importance of dialogue and community, grapplings with Plato's Ideas, and the relationship between ethics and metaphysics. Several axioms are striking, especially number 25 (24), which closely resembles the earliest formulations of the Pragmatic Maxim: "We only know our faculties by the conceptions or feelings they give us – by their results."<sup>150</sup> The overall argument concerns ethics and its relationship to metaphysics, concluding with the syllogism that one should never cause harm. It appears that Peirce was attempting to distill from the distractions of the dialogues all the truly logical conclusions, to winnow the logical wheat from the poetic chaff.

Notwithstanding the possible strong connections between what Peirce wrote here and his later formulation of Pragmaticism, it seems plain that for the early Peirce, Plato was not so much a philosopher as a writer of dialogues that contained occasional gems of thought. His "Metaphysical Axioms and Syllogisms" manuscript shows that he thought

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<sup>146</sup> MS 988. I will return to a more detailed discussion of this MS in chapter two. I am indebted to Ken Ketner for sharing his unpublished paper on "Peirce and Plato" with me, and for some of my insights into MS 988 which derive from that paper.

<sup>147</sup> Though he uses #4 twice, so the list appears to have only 26 axioms.

<sup>148</sup> Note that Robin's catalogue erroneously lists only six of these.

<sup>149</sup> This is Ketner's observation, and I think it is correct.

<sup>150</sup> I discuss this in more detail in chapter five.



those gems could be wrested from the soil and mounted on display without damaging them.

By 1902, Peirce's view of the value of Plato's dialogues had undergone a radical change. He wrote in his "minute logic" that

As to Plato, unless we are content to treat the only complete collection of the works of any Greek philosopher that we possess as a mere repertory of gems of thought, as most readers are content to do; but wish to view them as they are so superlatively worthy of being viewed as the record of the entire development of thought of a great thinker, then everything depends upon the chronology of the dialogues.<sup>151</sup>

In one way this is a continuation of what he has done, sporadically, all his life, beginning at least with his 1860 manuscript. But it is also a radical departure from that earlier project, which sought to extract from Plato whatever "metaphysical axioms and syllogisms" he could find in them, i.e. what he would later term "gems of thought." So his newer project of looking at the development of Plato's thought is both a rejection of what was then (and often still is) the standard way to read Plato and a self-criticism. This criticism is not just a matter of how to treat philosophical texts, but is a statement concerning the whole of inquiry. The earlier method Peirce employed, of "mining" a text for what is useful, pays no attention to development, and is the textual equivalent of grave-robbing. The work of the archaeologist and the work of the grave-robber are materially similar but distinct in what they seek: the robber seeks particular gems and

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<sup>151</sup> *MS 434*.

trinkets for utility, and fails to notice that the value of the trinkets has to do with the general development of the culture that produced them; the archaeologist seeks to observe development of an idea, represented in the particulars. It is easy to see that the ethics and the “metaphysics” and the epistemology of archaeology are closely related. So it is in the history of philosophy. I wish to note here that what mattered to Peirce in 1902 was the development of Plato’s thought. This manuscript contains nearly 200 pages on Plato’s life and writings, a testimony to the importance Peirce had by then come to place in developing an historical understanding of the work of Plato. This is in sharp contrast to his earlier view that what mattered was a firm grasp on the deductions Plato performed. Strikingly, these pages occur in the context of Peirce’s planned treatise on logic, indicating a marked shift from viewing Plato as a metaphysician with a handful of syllogisms worth noting in his writings to viewing him as a logician worth close study. In the years 1897-1902 Peirce produced many other manuscripts like this one, in which he is concerned with the correct method of history. Another long manuscript, which went through several revisions, is entitled “On the Logic of Drawing History From Ancient Documents, Especially from Testimonies.” Approximately one third of this manuscript is devoted to reporting Peirce’s extensive study of the life, writings, and philosophy of Plato. In studying Plato’s life Peirce was able to put into practice his method of history and so to refine it. This study wound up influencing other areas of his thought, including his theory and ethics of inquiry generally. Peirce’s re-investigation of Plato’s metaphysics helped Peirce in his thinking about tychism and synechism. This in turn

provided a means to develop his philosophy of religion, especially concerning miracles.<sup>152</sup>

## Conclusion

All the points made so far concerning the method and importance of the history of philosophy point to the conclusion that, for Peirce, the study of philosophy, in large part, is the study of the *history* of philosophy. When philosophy is understood only as conclusions or as doctrines, it ceases to be philosophy because it then ceases to be an inquiry. Inquiry occurs as a dialogue. Dialogues are always chronological and developmental; they take place over time, and the community of interlocutors in the dialogue should be expanded broadly across time. Philosophy cannot be understood, then, as conclusions and doctrines. To practice philosophy is to engage in the conversation of the history of philosophy. This is always worthwhile as an exercise, and its fruit is in gained understanding of “the significance of events for the human mind.” As Peirce wrote in his review of Fraser’s edition of the works of Berkeley,

As a matter of history, however, philosophy must always be interesting. It is the best representative of the mental development of each age. It is so even of ours, if we think what really is our philosophy. Metaphysical history is one of the chief branches of history, and ought to be expounded side by side with the history of society, of government, and of war; for in its relations with these we trace the significance of events for the human mind. The history of philosophy in the

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<sup>152</sup> “On the Logic of Drawing History From Ancient Documents, Especially from Testimonies,” begins with a discussion of Hume’s attack on miracle-testimony, and several early drafts of the manuscript mention miracles explicitly in the title. The latter third of the manuscript is concerned with an historical account of Plato’s life and the development of Plato’s thought. I will consider the topic of miracles in its relation to Peirce’s reading of Plato in chapter six.

British Isles is a subject possessing more unity and entirety within itself than has usually been recognized in it. The influence of Descartes was never so great in England as that of traditional conceptions, and we can trace a continuity between modern and mediaeval thought there, which is wanting in the history of France, and still more, if possible, in that of Germany.<sup>153</sup>

This, then, provides a justification for the present work as valuable both for its own sake and as a contribution to the history of thought. To study the philosophy of Peirce it is necessary to study its development. An adequate understanding of how Peirce came to his ideas can never be replaced with a mere account of what the final (or any single) formulation of those ideas might be. Peirce's writings on Plato are currently known to us only as "gems of thought." As I outlined in the previous chapter, they are scattered and disorganized, with no clear sense of when and in what context they were written. In the next chapter I will discuss briefly the context in which Peirce wrote on Plato in order to give a sense of the chronological development of his thought. My intention is to attend to both the internal chronology of the development of Peirce's thought and to the environment in which it grew up. An account of the environment matters both because it provides a sense of historical continuity and because it helps in our understanding of Peirce's thought in its proper context. The import of Peirce's thought is more clearly seen in relief against the background of the problems he faced, not in abstraction from them. Studies of Plato often tend to learn from Plato's conclusions in order to apply those conclusions to contemporary problems. Peirce's

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<sup>153</sup> *CP* 8.9 -- 1871 -- Review of Berkeley.

approach was to study Plato's method in the context of the problems Plato faced, making an example of it for the formulation of Peirce's method. A study of Peirce's historical context allows us to see his philosophy as part of a living dialogue, not merely as fragments. The internal chronology of Peirce's writings similarly allows us to see Peirce's thought in its development, and to observe the growth of his method and ethics of inquiry.<sup>154</sup> In chapters four, five, and six, I will then approach Peirce's writings on Plato in a more systematic form, to exposit the implications of his study.

However, several caveats must be made. First, this Peircean view of the history of philosophy by no means endorses a claim to the effect that ideas can be explained in terms of their representative author, or in terms of that author's environment or psychical state. To quote Pencak again, "great men do make a difference, men who cannot possibly be considered 'products' of 'forces.'" It is not the case, then, that a study of the development of Peirce's ideas should be a study of Peirce's psychology or relationships with other people with the aim of constructing a definitive account or a necessary explanation of why he thought what he thought.

Second, this account can only be considered a contribution towards an understanding of Peirce. This ought to be obvious from its limited scope, since only Peirce's engagement with Plato is under examination here. The history of philosophy cannot be written definitively by one person in one time, but it must be a continued dialogue, subject to revision, that includes all willing and able interlocutors. Just as Peirce called for an American history of philosophy in order to have a history that would

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<sup>154</sup> An exhaustive chronology of Peirce's writings on Plato would go beyond the scope of this dissertation. In its stead I have compiled what I believe to be a complete catalogue of Peirce's references to Plato in the Appendix, noting, wherever possible, the date of composition. The dates of composition of many of Peirce's papers are difficult to determine.

address current concerns and that would attempt to rectify previous errors in historiography, so this historical inquiry can only conceive itself as a contribution to the understanding of Peirce's thought, from a singular perspective, written in and for the community of inquiry into Peirce's thought. For this reason, the next chapter will address and attempt to include the observations of other inquirers into Peirce's engagement with Plato.

A third caveat also needs to be mentioned. Peirce was, at times, fairly sanguine about progress in history and in human inquiry. Though he was a fallibilist who espoused the view that each age would make errors that were open to correction in the following age, he tended to apply his view of the development of nature and natural law to the development of human intellect as well. As physical laws increase in generality over time, departures from the norms they represent may be expected to be fewer and rarer. Nowhere do I recall Peirce having made explicit that this was also his view of human intellectual development or moral conduct, but it might seem to follow from his evolutionary views that humans are on a constantly improving moral and intellectual trajectory. This view needs to be tempered not only by the real horrors of recent history but also by a reminder that for Peirce this moral and intellectual improvement is something that is attendant upon self-control. There is no rigid law of improvement, even if it be the general trend.

Finally, Peirce seems confident that our study of the history of philosophy will give us a fuller knowledge of our own age through knowledge of its genealogy. Peirce offers an observation, reminiscent of Foucault, that we know our own age least of all, and can only hope to approximate knowledge of it in our study of history. "Truly to paint the

ground where we ourselves are standing is an impossible problem in historical perspective.”<sup>155</sup> Corollary to this, Peirce occasionally suggests that a study of the history of philosophy will allow us to address current problems in a novel fashion. For instance, Peirce sometimes expresses the hope that as Pragmaticism becomes better known and understood, it will effect a reconciliation between science and religion.<sup>156</sup> I am making no such claims here, and I am not confident that this study of Peirce will lead to some determinate good. I hope, rather, with Peirce, that this study will have the effects that Peirce thought all such studies in the history of philosophy might have:

[The] history of logic is not altogether without an interest as a branch of history. For so far as the logic of an age adequately represents the methods of thought of that age, its history is a history of the human mind in its most essential relation -- that is to say with reference to its power of investigating truth. But the chief value of the study of historical philosophy is that it disciplines the mind to regard philosophy with a cold and scientific eye and not with passion as though philosophers were contestants.<sup>157</sup>

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<sup>155</sup> *CP* 4.32.

<sup>156</sup> *Cf.* *CP* 7.758.

<sup>157</sup> *CP* 1.28 (1869).

### Chapter 3: Cutting the Gems of Thought: Peirce, Transcendentalism, and American Platonism

To assist in the labor of understanding Peirce, one of the great minds that America has produced, it will be necessary to have some knowledge of the cultural occasion which gave rise to the man and hence in a sense also to the philosophy.<sup>158</sup>

I may mention, for the benefit of those who are curious in studying mental biographies, that I was born and reared in the neighborhood of Concord -- I mean in Cambridge -- at the time when Emerson, Hedge, and their friends were disseminating the ideas that they had caught from Schelling, and Schelling from Plotinus, from Boehm, or from God knows what minds stricken with the monstrous mysticism of the East. But the atmosphere of Cambridge held many an antiseptic against Concord transcendentalism; and I am not conscious of having contracted any of that virus. Nevertheless, it is probable that some cultured bacilli, some benignant form of the disease was implanted in my soul, unawares, and that now, after long incubation, it comes to the surface, modified by mathematical conceptions and by training in physical investigations.<sup>159</sup>

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<sup>158</sup> Feibleman, James. "The Relation of Peirce to New England Culture," in *The American Journal of Economics and Sociology*. Spring, 1944; 4.1:99-107.

<sup>159</sup> Peirce, "The Law of Mind," in *EP I*, 312-313.



## **Introduction**

In this chapter I wish to make three claims. First, as Robert Richardson, J. Muirhead, Daniel Dombrowski and Herbert Schneider have argued, that there is a Platonistic strain in American philosophy. Schneider claims that the history of American thought must be understood in part as a continuation of European Platonistic philosophy. Muirhead makes a similar claim about Anglo-Saxon philosophy more broadly. Richardson and Dombrowski argue that the Transcendentalists consciously pressed Platonism into the service of Transcendentalist mysticism, romanticism, and individualism. They both imply that this appropriation of Platonism has had consequences for American thought more broadly.

Second, I wish to claim that Peirce's philosophy may be seen as standing within that tradition of Platonism, as Joseph Ransdell, Kelly James Parker, Muirhead, and Ken Ketner have argued. By this second claim I mean that elements of Peirce's philosophy may be seen as developments of American Platonism. Ransdell argues, in particular, that Peirce is the direct heir of what he calls the Socratic element in Plato's thought. Parker claims that Peirce's metaphysics demonstrates certain affinities with Neo-Platonism. Muirhead makes the general claim that Peirce's metaphysics and method of inquiry are indebted to Platonism. Ketner suggests that the connection between Peirce and Plato might be one that occurs on several levels, and shows that the earliest formulation of Peirce's pragmatic maxim occurs in the young Peirce's study of Plato.

Third, I will argue that Peirce understood himself as working within this tradition. On this last point, Peirce saw his engagement with that tradition increasing over time. As a young man he was attracted to some of Plato's method and especially the Socratic elements of Plato's thought, but was repulsed by what he perceived as Platonism's insufficient attention to logicity and consistency. As a mature thinker, Peirce returned to Plato both as a model for self-correction and as a stimulus for the development of his own categories. Peirce drew on what we might term the mystical Platonism of the Transcendentalists as a starting point for developing Socrates' method of inquiry. Moreover the accounts Peirce gave of the development of his philosophy – in his own intellectual autobiographies – shows an increasing awareness of the significance Plato played in his thought as Peirce grew older. One key to understanding the shift in Peirce's thought about Plato is the book written by Wincenty Lutoslawski, *Origin and Growth of Plato's Logic*, published in 1897. When Peirce discovered it, Lutoslawski's book allowed Peirce to understand Plato as a logician and as a developmental thinker whose own thought grew over time.

I will take my bearings from Peirce's own writings, especially his definition of "Platonistic" and his autobiographical writings discussed in the previous chapter. My methodology is that identified in the preceding chapter, especially Peirce's own method of drawing intellectual history.

Peirce's thought grew up in an environment that held a strong Platonistic strain. Peirce identified this strain as mystical and idealistic, and associated it most immediately with the Concord Transcendentalists. He viewed aspects of this strain positively, and other aspects negatively. Early on, he rejected what he saw as dogmatic, nominalistic,

and uncritical in Plato. In his earliest understanding of Plato, derived in part from the Transcendentalists, these negatives were strong elements. However, he later came to embrace Plato as a model for his own inquiry.

### **The Platonistic Strain in American Thought**

In 1897, when the Polish philosopher Lutoslawski wrote his *Origin and Growth of Plato's Logic*, he sent a copy to William James, and shortly thereafter Peirce came to visit James. James later wrote to Lutoslawski that he had given the book to an eminent American philosopher, probably meaning Peirce. At any rate, Peirce came into possession of Lutoslawski's book around 1898, and it became the catalyst for one of the major changes in Peirce's thought. After reading Lutoslawski's book, Peirce's writings over the remaining seventeen years of his life were pervaded with references to Plato, and Plato took on a prominent role in Peirce's mature thought.

I am not arguing that Peirce became a Platonist after reading Lutoslawski. After all, Peirce had identified Platonism as having influenced his thought from his earliest years. As I have already noted, several historians of American philosophy have argued that Platonism is one of the dominant strains in American thought. For instance, in his *A History of American Philosophy*,<sup>160</sup> Herbert Schneider devotes the whole first part of the book to "Platonism and Empiricism in Colonial America." The first chapter is "The Platonic heritage of the New England Puritans." Schneider traces American Platonism to the late medieval French logician Pierre (de la) Ramée (a.k.a. "Peter Ramus"). While Peirce does not mention Ramus frequently in his work, when he does mention Ramus

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<sup>160</sup> Schneider, Herbert W., *A History of American Philosophy*, 2<sup>nd</sup> ed. New York: Columbia University Press, 1963.

Peirce exhibits more than a passing familiarity with his work. Laurel Warren Trufant has argued that Peirce's logic draws heavily on Ramus' evolutionary logic.<sup>161</sup> Peirce refers to Ramus several times in his manuscripts and twice (at 1.355 and 4.30) in the *CP*. The second of these references (4.30) notes that Ramus was a logician who "contributed a few things, but on the whole, rather important things to the tradition of logic." There is another reference in the *CP* 2.205 to "the Ramists" in which he traces two strands of a Platonic heritage of critical logic through Ramus on the one hand, and Locke and Kant on the other: "This word, [kritiké] used by Plato (who divides all knowledge into epitactic and critic), was adopted into Latin by the Ramists, and into English by Hobbes and Locke. From the last it was taken into German by Kant, who always writes it Critik..." Plainly Peirce knew and read Ramus, and thought well of his Platonist logic. This acknowledgement of the importance of Ramist logic would also seem to further indicate that Peirce viewed his thinking as deeply affected by Plato (through Kant).

J. H. Muirhead similarly argues that Platonism is a prominent strain in American philosophy.<sup>162</sup> Muirhead traces a strain of Platonic idealist thought in Anglophone philosophy from John Scotus Eriugena through Coleridge to Bradley in the U.K. and Royce in the U.S.A. He identifies five characteristics of this tradition which set it apart from all others: 1) its emphasis on the distinction between being and seeming (Muirhead sees this in Kant's treatment of the transcendental object, for instance); 2) a commitment to the reality of universals, or of plural objects "*sub specie unitatis*"; 3) "the complementary principle that, though *independence* is phenomenal, *difference* is not,"

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<sup>161</sup> Trufant, Laurel Warren. *Metaphors in the Construction of Theory: Ramus, Peirce, and the American Mind*. (Ph.D. Thesis, University of New Hampshire, 1990.) Ann Arbor: UMI, 1991. 357-385.

<sup>162</sup> Muirhead, J. H. *The Platonic Tradition in Anglo-Saxon Philosophy*. London: George Allen & Unwin 1931 (reprint: 1965). (Especially pp. 324-346, on Peirce and Platonism.)

that is, difference is real; 4) “it is in the soul, or, as the greatest of all Platonists called it, the ‘entelechy’ that you find the reality of the body”; and 5) it is in the “soul” of a human that the meaning of that human is found.<sup>163</sup> Muirhead’s identification of Aristotle as a Platonist in his fourth point is worth noting, since Peirce made the same identification later in his life. Max Fisch describes Muirhead’s position as being that “Peirce was essentially an idealist in the Platonic tradition and that his philosophical affinities were with Royce rather than with James and Dewey.”<sup>164</sup> Fisch argues against this characterization, and emphasizes Peirce’s affinities with James and Dewey. Muirhead had only a limited access to Peirce’s published works, enough to identify Peirce as within the tradition of American Platonism but near its fringes. A closer reading of Peirce than that of Muirhead would, I think, place Peirce closer to the center of this tradition, albeit with certain fallibilistic reservations. If Muirhead’s five points are accepted, then it is quickly evident that a great part of American philosophy up to and including Peirce falls within the broad scope of Platonism.

In other words, Peirce did not acquire Platonism late in life from Lutoslawski. Platonism had been present in his thought since his earliest exposure to the mystical idealism of the Concord Transcendentalists in his youth. Peirce did not embrace this Platonism of his youth despite being attracted by several of its features. On the one hand, Transcendentalists like Emerson and Thoreau held that nature was charged with possibility and meaning, that the world presented itself for inquiry, and that it was of the nature of a mind. Just as Peirce was attracted to similar Platonistic elements in Henry James, Sr.’s Swedenborgianism, Peirce found many of the doctrines of the

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<sup>163</sup> Muirhead, *op. cit.* pp. 413-418.

<sup>164</sup> Max Fisch, “Peirce’s Place in American Thought,” in *Peirce, Semeiotic and Pragmatism*. Bloomington: Indiana University Press, 1986. p. 305

Transcendentalists to be conducive to science. Peirce shared Emerson's rejection of reductionistic materialism because it hindered scientific pursuits. On the other hand, the Transcendentalists' (and especially Emerson's) rejection of systematic philosophy, their contention that reason is ultimately a non-discursive faculty, and their attempt to make the individual into the measure of all meaning in nature amounted to an espousal of universal mysticism. This mysticism was, effectively, a contemporary version of Protagorean relativism. If man is indeed the measure of all things, then science is hindered by the impossibility of ever finding common ground for rational conversation about real objects of inquiry. It is in this context that Peirce's late Platonism may be understood. Peirce was aware of the Platonistic strain in his own intellectual environment from his earliest years and was, like his parents, interested in some of its doctrines but very cautious about adopting them uncritically. Lutoslawski's exposition of Plato's logic showed Peirce a new side to Plato, in which Plato was not merely a moralist or metaphysical merchant of Forms. Rather, Lutoslawski showed that Plato's own logic (and, with it, his metaphysics) developed over time in an attempt to reconcile his idealism with his belief in the importance of community in inquiry. Peirce's turn to Plato late in his life was his response to Transcendentalism, modified by the insights of Peirce's metaphysics and epistemology.

### **Pilgrim's Historical Regress**

One of Peirce's first and best biographers, Gérard Deledalle, has pointed out that Peirce's study of logic brought Peirce at each stage further and further back in his study of the history of thought. The story is like the apocryphal story of Hobbes reading the last page of Book One of Euclid's *Elements* first, and then working backward to see

whether the final theorem could have a logical foundation in what preceded it.<sup>165</sup> It also bears a strong resemblance to what Aristotle frequently does in reviewing the doctrines of those who have gone before him before pronouncing his own views.<sup>166</sup> Peirce may well have learned this from Aristotle, and in any case, it is worth remembering how Aristotle understood historical inquiry. In his *Histories of the Parts of Animals*, (more frequently entitled *Enquiry or Investigations into the Parts of Animals*, or simply *On the Parts of Animals*,) Aristotle concludes his preliminary remarks on anatomical categories by pointing out that unless one conducts such *historia*, or inquiries, into the subject of one's investigations, then one simply has no philosophical investigation.<sup>167</sup> James Feibleman, speaking of Peirce, makes a similar point about the importance of historical inquiry as a prelude to philosophical investigation. "To assist in the labor of understanding Peirce, one of the great minds that America has produced, it will be necessary to have some knowledge of the cultural occasion which gave rise to the man and hence in a sense also to the philosophy."<sup>168</sup> In some sense, the philosophy and the context are connected.

This historical inquiry is an essential empirical part of Aristotle's, and Peirce's, notion of inquiry. Peirce read his contemporaries, and then read their putative sources to see if the premises borrowed from earlier thinkers were sound. As I discussed in the last chapter, Peirce's dissatisfaction with his contemporaries as historians of thought made him a philologist and an historian of thought who worked backward through the history of logic. Deledalle writes,

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<sup>165</sup> Cf. Thomas Hobbes, *Leviathan*, Michael Oakeshott, ed. Oxford: Basil Blackwell, 1957, p. xv.

<sup>166</sup> Cf. Aristotle, *Metaphysics* Bk. 1 ch. 3.

<sup>167</sup> Cf. Aristotle, *De Partibus Animalium*, 491a12.

<sup>168</sup> Feibleman, James. "The Relation of Peirce to New England Culture," in *The American Journal of Economics and Sociology*. Spring, 1944; 4.1:99-107.

The history of Peirce's thought is a return to the origins: From English Empiricism he passed to the Middle Ages from which he learnt classical logic and through Duns Scotus he became familiar with the reality of universals; from the Middle Ages he then turned to Greek Antiquity and all the more eagerly as he was on the verge of finding the solution to all his cosmological problems as well as the reply to unformulated questions concerning the nature of categories, signs and science.<sup>169</sup>

Deledalle's observation is correct: Peirce's turn to the Greeks coincided with the development of his own cosmology, and many of the problems he sought to discuss with the ancients were cosmological. Chief among these were the problem of novelty in the universe and the concordant problem of evolution. What makes possibility real, and how can prodigious events and novelties be accounted for? To what extent is an evolutionary model applicable to the universe – does it apply only to biological life or does it range further, perhaps all the way down to the very life and structure of the cosmos? As cosmological problems, they were also metaphysical problems that demanded a suitable means of inquiry, and so they were attended by parallel problems in semiotics, the ethics of inquiry, epistemology, historiography, and logic.

In making this inquiry Peirce is not encountering the ancients for the first time any more than Aristotle encountered animals for the first time when he wrote about anatomy. Rather, Peirce's historical inquiries were attempts to attend to the history of his own thought, thereby making the tacit substance and vocabulary of his thought explicit.

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<sup>169</sup> Gérard Deledalle, *Charles S. Peirce: An Intellectual Biography*. (Translation of *Charles S. Peirce: phénoménologue et sémioticien*). Amsterdam and Philadelphia: John Benjamins Publishing Co., 1990. p. 43.



### **The Law of Mind**

Peirce himself affirms what Deledalle and Feibleman say. In his frequent autobiographical passages, Peirce often discusses his Platonistic heritage and its influence upon his thought. One such passage occurs in the preamble to his 1892 *Monist* essay, “The Law of Mind.” In it Peirce writes of his own “mental biography.” He draws especial attention to the influence of Transcendentalism on his thought, pointing out for instance that he grew up near Concord in Cambridge. It would have been simpler to say “in Cambridge,” but Peirce wanted to emphasize the geographical proximity of his birthplace to the symbolic (and actual) seat of American Transcendentalism. In doing so he underscores that, like his body, his mind grew up under the influence of Transcendentalism. Let me recall a quotation from the previous chapter. Peirce wrote,

I may mention, for the benefit of those who are curious in studying mental biographies, that I was born and reared in the neighborhood of Concord -- I mean in Cambridge -- at the time when Emerson, Hedge, and their friends were disseminating the ideas that they had caught from Schelling, and Schelling from Plotinus, from Boehm, or from God knows what minds stricken with the monstrous mysticism of the East. But the atmosphere of Cambridge held many an antiseptic against Concord transcendentalism; and I am not conscious of having contracted any of that virus. Nevertheless, it is probable that some cultured bacilli, some benignant form of the disease was implanted in my soul, unawares, and that

now, after long incubation, it comes to the surface, modified by mathematical conceptions and by training in physical investigations.<sup>170</sup>

Peirce conceived of his own thought as part of an historical continuum, and as having possibly more influences than could be consciously accounted for. His model was not that of a necessary dialectic, though, in which each present fact can be explained as the necessary result of known precedents or as the unavoidable result of the synthesis of apparently opposed views. Rather, he argued for an evolutionary dialectic that incorporated both developmental and spontaneous growth in thought. This dialectic is more Platonic than Hegelian. It develops like a conversation, with a direction that is subject to spontaneous change. The order in which Peirce lists his influences in the passage above helps to illustrate this. Unlike Hegel, Peirce does not begin with some putative ideal germ and then show how the full flower of modern thought must have grown out of it. Instead, Peirce's description is Aristotelian, beginning with what is clearest to him and moving backwards through history towards an ever less clear past known perhaps only to God. Each stage must stand on its own force; evidence of heritage and influence are important, but they do not count as proof or legitimization of belief. Rather, the continuity of thought throughout history is like a dialogue in which each stage of thought is subject to logical critique. It also resembles a dialogue in that while there is a clearly identifiable development of ideas, no stage is wholly predictable from the content of those that precede it. The development of thought can only be

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<sup>170</sup> *CP* 6.102.

partially explained by appeal to environment, but it also contains some element of spontaneity. It is the task of each thinker to adduce arguments for her opinions.

Peirce makes this point more forcibly in another such “mental biography,” *MS* 1606, evidently written in his later years. There he concludes a three-page account<sup>171</sup> of influences on his thinking with these words: “Such are the influences under which my opinions have been formed; but I repeat that I do not intend to advance any proposition which is not supported by arguments of the degree of strength which befits the present state of philosophy.” If the Transcendentalists infected him with some “cultured bacilli,” Peirce nevertheless insists that those “bacilli” are not present in his mature thought unless they have been subjected to a logical and mathematical scrutiny. This, at least, is Peirce’s intention, but plainly he is also aware that he is not conscious of all his influences. Even when he says that whatever mysticism might have infected him has been modified by mathematics, he must have in mind his father’s mathematical mysticism which played such a role in shaping the younger Peirce’s thought.

The question presented by this passage is this: What does Peirce mean by “arguments of the degree of strength which befits the present state of philosophy”? Evidently Peirce intends to say that the standard of strength in arguments is at least to some degree dependent on history, or rather on the historical development of philosophy.<sup>172</sup> Since this phrase comes at the beginning of his essay on synechism, a doctrine he is advancing as an important and recent development in philosophy, it is reasonable to assume that he is offering the story of his own intellectual development as a

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<sup>171</sup> The *MS* contains three pages, but there is a lacuna between pages two and three. It appears that page three was the second page of an earlier draft, the first page of which is now lost.

<sup>172</sup> It should be noted here that Peirce is taking a middle stance between a wholly a-historic view of philosophy and a strictly historicist view.

case-in-point. That is, he is not speaking of irresistible conclusions that have necessarily shaped his thinking. Rather, these “bacilli” have affected his thinking *synechistically*. Succinctly, synechism holds that ideas spread in a general fashion, with diminishing force as they become more general. Ideas that begin as the possession of a single thinker may be disseminated more broadly in a community over time. In this process, they lose some of the logical force and specificity they had originally, but they function as general shapers of thought, suggesting certain possibilities and lines of inquiry over against others. Eventually they become a tacit part of the intellectual environment of a community, shaping the thought of the members of that community whether they are aware of it or not.<sup>173</sup>

So this list in “The Law of Mind” is Peirce’s attempt to identify the influence of Transcendentalism on his thought, modified, as it is, by logical and mathematical considerations. This Transcendentalism is idealistic and mystical, and these traits are strongly indebted to the Transcendentalists’ embracing of the Platonism already present in American thought.

### **“In the Neighborhood of Concord”: The Influence of Transcendentalism**

The preface to “The Law of Mind” is not the only place where Peirce notices the influence of Transcendentalism. In *MS 1606*, Peirce repeats the theme of being intellectually and geographically near to but not quite among the Transcendentalists. He

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<sup>173</sup> Rorty takes this idea and runs with it in the first chapter of *Philosophy and Social Hope* where he uses Wittgenstein to argue that for a culture that does not have the word “elephant” there are no elephants. Peirce does not commit himself to such a strong view. Peirce would say only that the culture without experience of elephants doesn’t think about elephants.

begins with an account of his family, where he says of his parents that “They were Unitarians; but they were conservative, not without sympathy and some degree of admiration for the isms of New England, yet engaged in none of them.”<sup>174</sup> Immediately after this, Peirce recalls listening to Emerson and Margaret Fuller as his earliest memories.

One of my earliest recollections is hearing Emerson deliver his address on “Nature”; and I think that on that same day Longfellow’s Psalm of Life was recited. So we were within hearing of the transcendentalists, though not among them. I remember when I was a child going upon an hour’s railway journey with Margaret Fuller, who had with her a book called the *Imp in the Bottle*.<sup>175</sup>

Similarly, in one of his letters to Lady Welby Peirce wrote of the influence of people who came to visit Peirce’s father when Peirce was a child. He wrote that

All the leading men of science, particularly astronomers and physicists resorted to our house; so that I was brought up in an atmosphere of science. But my father was a broad man and we were intimate with literary people too. William Story the sculptor, Longfellow, James Lowell, Charles Norton, Wendell Holmes, and occasionally Emerson, are among the figures of my earliest memories....Another figure of my childhood was Emerson’s friend Margaret Fuller.<sup>176</sup>

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<sup>174</sup> *MS* 1606.1

<sup>175</sup> *MS* 1606.1. Peirce’s handwriting is not clear, so the title of the book might be “The *Ink* in the Bottle.” “The *Imp* in the Bottle” is the name of one of the stories recorded by the Brothers Grimm.

<sup>176</sup> *PW* 113-4.

While not all of these count among the Transcendentalists, the fact that Emerson and Fuller regularly appear in Peirce's intellectual autobiographies suggests the importance Peirce placed on his proximity to them in his youth.

The repeated emphasis on influence through proximity rather than through identity underscores Peirce's belief that ideas are not discrete but spread continuously and organically. Ideas appear in a context. This is, after all, the law of mind.<sup>177</sup> "The one primary and fundamental law of mental action consists in a tendency to generalization. Feeling tends to spread; connections between feelings awaken feelings; neighboring feelings become assimilated; ideas are apt to reproduce themselves. These are so many formulations of the one law of the growth of mind."<sup>178</sup> One may see in this statement a foreshadowing of Peirce's method of thinking about the Platonic Ideas: they are not discrete supercelestial existences but generals related through their real continuity.

The influence of Transcendentalism likely made Peirce alive to a certain set of problems that were of importance to the Transcendentalists. His proximity to them would have shown him the resources they appealed to in addressing these problems. These resources included various forms of nineteenth-century New England Christianity; Kant, Schelling, and German Idealism; and the reaction to Idealism in Romanticism. The problems they sought to address were, negatively, freedom from dogmatism, materialism, and Lockean sensationalism. Positively, they hoped for a second Enlightenment through humane letters and through the culture of the mind of the individual.

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<sup>177</sup> And this, eventually, was his view of the Ideas of Plato as well: Forms "slowly percolate." I will make this point more strongly in the next two chapters in discussing the way language develops and in discussing Peirce's evolutionary metaphysics.

<sup>178</sup> CP 6.21.

The influence of this ideal on Peirce can be seen in the way that Peirce attempted to realize in his home, Arisbe, a school similar to those envisioned by George and Sophia Ripley at Brook Farm and by Bronson Alcott at Fruitlands. The Ripleys and Alcott intended the liberation of humanity from dehumanizing labor through communities where each person worked at what she found most fitting for herself. Through series of readings and lectures, the entire community would learn together the latest developments in the sciences and in humane letters. In this way each person could achieve her potential and the whole community could benefit from it. The Peirces impoverished themselves investing large sums of money into Arisbe in order to make it large enough to accommodate students who would come to join Peirce's school and intellectual community. Although Peirce's experiment met with even less success than did the Ripleys' and Alcott's, his partial imitation of them shows the lasting influence of the Concord Transcendentalists on him. (I say "partial" because the community at Arisbe was not to be a commune where economic equality or equality in labor were to be practiced, but where the real community was to be a community of investigation. Peirce envisioned himself as the leader of this community, of course.)

Another example of the proximity of Peirce's thought to that of the Transcendentalists can be seen in a comparison of Peirce's "Neglected Argument for the Reality of God" with Thoreau's "Walking." While the two essays differ in ostensible topic, careful reading shows they share a concern with the method of inquiry and discovery. Thoreau's version involves "sauntering," or aimless walking with the intention of letting the mind open up playful conversation with itself. Thoreau contends that if one does not attempt to close down inquiry by determining in advance that one's

inquiry shall have some useful or profitable result, one becomes open to the spontaneous eruption of beautiful novelty. Thoreau calls this “sauntering towards the Holy Land.”

The parallel with Peirce is obvious: Peirce’s “Neglected Argument,” written some forty years after Thoreau’s essay was published, also contends that it is in allowing the mind to enter into free, playful conversation with itself that one becomes open to novelty and, ultimately, to what is beautiful and holy. Peirce calls this “Pure Play” or “Musement,” but he might as well have called it “sauntering,” especially since he claims, like Thoreau, that it is best done outdoors and alone.<sup>179</sup> Seen in the light of Thoreau’s essay, Peirce’s essay shows Peirce’s thought developing as a continuation of one aspect of Transcendentalist thought, and not as a radical departure from it. Peirce’s “Neglected Argument” picks up where Thoreau’s “Walking” leaves off. That is, for Peirce, the argument is only completed when one returns from sauntering and re-enters the community of inquirers. The Transcendentalists were already doing this, of course, but Peirce articulates the logic and the ethics of sauntering in a way that Thoreau seems never to have noticed.

If it is plain that Peirce wishes to make known the influence of Transcendentalism on his thought, it is equally plain from the list of names he cites—Emerson, Hedge, Schelling, Plotinus, and Boehm—that he thinks of Transcendentalism as a development of Idealism. Each of the thinkers he mentions in the list in “The Law of Mind” is notable as an Idealist. This connection is one made by the Transcendentalists themselves, of course. As Emerson says in his essay “The Transcendentalist,”

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<sup>179</sup> CP 6.49, “A Neglected Argument for the Reality of God.”



What is popularly called Transcendentalism among us, is Idealism; Idealism as it appears in 1842....the Idealism of the present day acquired the name of Transcendental from the use of that term by Immanuel Kant, of Königsberg, who replied to the skeptical philosophy of Locke....by showing that there was a very important class of ideas or imperative forms, which did not come by experience, but through which experience was acquired; that these were intuitions of the mind itself; and he denominated them *Transcendental* forms.<sup>180</sup>

As Idealists, these thinkers are also united by their Platonistic heritage. Emerson's use of the word "forms" here probably has more to do with his admiration of Plato than with his appreciation for Kant. Emerson was not a close reader of either one, but understood both to be poets, prophets, and mystics. Emerson frequently mentioned Shakespeare, Moses, and Plato together, to underscore his belief that all three were engaged in the same project of attacking sensationalism and materialism. For Emerson, Plato was the Idealist *par excellence*, because his idealism incorporated religion and poetry without becoming fixated on either one. Platonism brought with it the moral doctrine of the freedom of the individual thinker to discover meaning everywhere. As William Channing said in an 1828 address,

Whence do we derive our knowledge of the attributes and perfections which constitute the Supreme Being? I answer, we derive them from our own souls....I am aware that it may be objected to these views, that we receive our idea of God from the universe, from his works, and not so exclusively from our own souls.

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<sup>180</sup> Emerson, R. W., "The Transcendentalist," in *The Complete Writings of Ralph Waldo Emerson*. NY: Wm. H. Wise & Co., 1929. (101-4)

The universe, I know, is full of God. The heavens and earth declare his glory. In other words, the effects and signs of power, wisdom, and goodness, are apparent through the whole creation. But apparent to what? Not to the outward eye; not to the acutest organs of sense; but to a kindred mind, which interprets the universe by itself. It is only through that energy of thought by which we adapt various and complicated means to distant ends, and give harmony and a common bearing to multiplied exertions, that we understand the creative intelligence which has established the order, dependencies, and harmony of nature. We see God around us because He dwells within us.<sup>181</sup>

Similarly, Coleridge's 1829 edition of *Aids to Reflection*, (edited in America by New Englander James Marsh, a student of the Cambridge Platonists), distinguished this mystical reflection from both revealed religion and natural religion. Herbert Schneider writes that

The technique of meditation for inspiration, insight or wisdom was dignified by Coleridge, following Schelling, as a separate and unique human faculty, called "reason" to distinguish it from the discursive or demonstrative "understanding." Thus "spiritual religion" was qualitatively different from "natural religion" and "revealed religion." Here was piety without superstition and spirituality without creed.<sup>182</sup>

This is just what Emerson draws from Plato: the freedom to see the whole world as a mind akin to our own, ready to converse with those who attend to it, full of possibility for revelation.

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<sup>181</sup> William E. Channing, "Likeness to God," in Joseph M. Blau, ed. *American Philosophical Addresses, 1700-1900* (New York: Columbia University Press, 1946) 566-585.

<sup>182</sup> Herbert Schneider, *A History of American Philosophy*, 270.

Emerson distinguishes his Idealism from materialism. Where materialism “insists on facts, on history, on the force of circumstances and the animal wants of man,” the Idealist insists “on the power of Thought and of Will, on inspiration, on miracle, on individual culture.”<sup>183</sup> For Emerson this latter insistence is on the importance of truth which is known mystically, that is, through the private feelings and experiences of the knower.

Daniel Dombrowski and Robert Richardson have argued that most or all of the Transcendentalists take this mystical cue from Platonism. Dombrowski writes,

William Wordsworth said to Ralph Waldo Emerson in 1848 that if Plato’s *Republic* were published as a new book it would unfortunately have few readers, yet “we have embodied it all.” “We” refers at least to Wordsworth himself and to Emerson, but probably also to Samuel Taylor Coleridge, the Cambridge Platonists, and Thomas Taylor, all of whom Henry David Thoreau read and admired.<sup>184</sup>

Robert Richardson has written, “Transcendentalism is the fullest flowering of the Liberal Platonic tradition in America.”<sup>185</sup> Emerson, who gave such high praise to Plato in his essays, received Plato through such diverse sources as Boehme’s mysticism, Kant (read through Coleridge), and Bronson Alcott.<sup>186</sup> Platonism pervaded Transcendentalism, and through it, American thought and culture.

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<sup>183</sup> Emerson, *Ibid.*, (101)

<sup>184</sup> Dombrowski, Daniel, *Thoreau the Platonist*. New York: Peter Lang, 1986, p.1.

<sup>185</sup> Richardson 1997; 11.

<sup>186</sup> Richardson, 1995; 204, 347 *et passim*.

The influence of both of the environmental elements Emerson identifies — materialism and idealism — can be seen in Peirce’s categories. From the Transcendentalists he gained the cultured bacilli of Platonic Idealism, mysticism and the miraculous; from the materialists he gained the tools to modify those bacilli through logic, mathematics, and empirical science. In Peircean terms, the Transcendentalists emphasize spontaneity or firstness, and thirdness or the generality of ideas; the materialists emphasize brute secondness and reaction. Peirce’s autobiography acknowledges that his thought has been tempered both by the tacit materialism of his scientific training and by the mystical Platonism of eastern Massachusetts. In his 1901 monograph “On The Logic of Drawing History From Ancient Documents, Especially From Testimonies,” Peirce gave equal importance to the hard sciences and to what might be called the “power of Thought and Will.” He wrote,

Ancient history occupies a place among the psychical sciences somewhat analogous to that of astronomy among the physical sciences. The one is a description of what is distant in the world of mind, as the other is a description of what is distant in the world of matter; and curiously enough, or significantly enough, an ancient alliance exists between the two sciences through chronology.<sup>187</sup>

Peirce’s language of the two worlds of matter and mind echoes the Platonistic notion of a world of ideas parallel to the world of appearance. By 1901 Peirce had

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<sup>187</sup> *MS 690*, typescript, p. 21.

reconciled the two worlds in his thought by an alliance in their chronological development, made observable by developments in Peirce's logic. But in 1892, when he made his remark about "cultured bacilli," Peirce had not yet come to terms with the Platonists. Nevertheless, at that time he was aware of this influence, and he identified it as Platonistic and mystical.

Peirce eventually embraced an idealism not wholly unlike this—"Schelling-fashioned idealism" as he called it—that viewed matter as "effete mind," but Peirce would insist that this sharp distinction between "reason" and "understanding" was misconstrued if it meant that "reason" had no logic, since that would effectively cut it off from rational inquiry.

So Peirce, in "The Law of Mind," is attempting to identify a mystical Platonism that influenced him through the Transcendentalists, and that has been modified by his study of logic.

### **Peirce's Definition of "Platonic"**

To quote once again from "The Law of Mind," Peirce spoke of "monstrous mysticism of the East," which is pretty plainly connected to the whole strain of thinkers he mentions in that quote. Of course, the "East" could refer to Concord's Transcendentalism, but appearing where it does at the end of the chronology, it seems most likely that Peirce is speaking of the Far East. So he has connected mysticism with what is plainly a Platonistic and idealistic strain in Western thought. What did Peirce mean by 'mystical' Platonism? Peirce did not mean that all Platonism entails mysticism, but that there was a strain of Platonism that made a mystical appeal. It is mystical precisely to the degree that it supposes a transcendent object of knowledge, an object of knowledge that transcends our experience. This tradition can be traced back at least as

far as Socrates' appeal to his *daimon* in the *Apology*, his claim to have some mantic spirit in *Euthyphro* and *Cratylus*, and his appeal to mythopoeisis when, in certain dialogues, the *logos* has run its course without giving a satisfactory conclusion, for instance in the *Republic*, *Gorgias*, *Phaedo*, and *Phaedrus*. In each of these cases, there was some Form or Idea that was sought in vain in the dialogue. Taking their cue from this kind of Socratic inquiry, Platonists have often taken the Ideas or Forms to exist, though not in this world. At times, Socrates, Plotinus, Emerson all propose something like this. Boehme, Henry James, and Thoreau may also be added to this list, if we understand inquiry into the Ideas to mean the quest to make acquaintance with that which does not present itself to us in outward experience but only in internal dialogue.

Of course, if the Ideas do exist, but they do not exist for us, that is, in our world, then we must ask how they can be known. To foreshadow Peirce's discovery, let me offer one possibility that is suggested not at the end but at the beginning of each of the "Socratic" dialogues. Usually, as the dialogue is beginning, Socrates proposes a "likely story," or hypothesis, to be investigated elenchically. If the Ideas are known only as likely stories or probable accounts, then they are known pragmatically, in terms of our experience of the world (which is taken to reflect the Ideas somehow, by participation or instantiation of the Ideas) and of the consequences of our believing in them. But any claim to know them as they are and apart from our experience of the world, could be classed as mystical knowledge. Usually, these elenctic investigations are frustrated, leaving the reader to wonder about Plato's solution to his own problem, and offering license to mystics who take Plato to mean that the solution is found not in logical investigations but in myths or in more "likely stories."

Peirce's dissatisfaction with this mystical element in Platonism can be seen in his 1885 definition of "Platonism" for the *Century Dictionary* (see *MS 1604*).<sup>188</sup> Peirce's definition illustrates both what Peirce found attractive in Platonism and why he dismissed certain of its elements as mystical. His definition is particularly instructive since he claims in *MS 1604* to have written it from memory, and so it may be taken to reflect Peirce's reception of the American strain of Platonism more than his recent reading in scholarship on Plato. That is, if this definition was indeed written from memory, then it gives us an insight into how Peirce received Platonism through his community, synechistically. This is his definition:

**Platonic** I. a. Pertaining to Plato (about 427-347 B.C.), or to his doctrines.

Reference to the school of Plato and to his followers is more usually expressed by the adjective *Platonistic*. Plato wrote in dialogues, which are equally admirable from a literary and from a philosophical point of view.<sup>189</sup> He held that the object of philosophy is beauty<sup>190</sup>; that without a deep sense of ignorance no man can philosophize; that judgments of common sense are open to doubt; that the senses may err, and at best can afford only likelihood (*eikasia*); that the experience (*dóxa*), built out of perceptions, though safer, does not know the reasons of phenomena; and that man is the measure of things, not in his experience of

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<sup>188</sup> (*CD 4540*), Peirce's definition is actually of "Platonic," but this serves as the *Century Dictionary's* definition of "Platonism." In "My Reading in Philosophy" (later version, *MS 1604* – he does not mention it in the earlier *MS 1605*) Peirce recalls it as "My description of Platonism," which he wrote in November 1885.

<sup>189</sup> This may be ironic. Peirce was not particularly impressed with Plato's work at this time.

<sup>190</sup> Peirce changed this view in his later writing, especially in the "Minute Logic," (*MS 434*). He wrote this definition from memory, but later, when he began his earnest investigation into Plato after his reading of Lutoslawski, Peirce recognized that Plato's thought underwent a development, and that Plato's conception of the good changed over time.

particular facts, as Protagoras would have it, but in his knowledge of reasons, which alone is ennobling. Philosophy according to Plato has three branches—dialectic, physics, and ethics. Dialectic, the art of discussion, proceeds by definition and division. Division should be by dichotomy. He holds strongly to the truth of cognition: the process of mind and the process of nature are one. Neither the Eleatic doctrine that all is One and the Many are mere illusion, nor the Heraclitan doctrine that there is only a fluid manifold without unity, is the truth<sup>191</sup>; there is a mixed being (mikté ousía): being has an eternal and an evanescent element, and only a compound of these can be an object of science. The One in the Many is the Idea, the active force prescribing regularity (as we should say, the law of nature), which in supercelestial place subsists while individual cases arise and perish.<sup>192</sup> The ideas make up an organism, or living system (zóon). They are themselves regulated by an idea of a teleological character, the Good, or ultimate purpose of all things, identical with Reason, the true Being, (óntos ón), the One, King of heaven and earth, which, immutable, draws all things toward itself. This Reason is God, who is related to the ideas as a poet to the ideals he has created and intends to embody. That other element which in the actual condition of things in this world has not yet been eliminated so as to leave pure Reason is extended quantity (mikrón kaí méga) or body (sóma), nearly Aristotle's matter

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<sup>191</sup> This mediation between Heraclitean and Eleatic doctrine is particularly visible in Peirce's reading of the *Cratylus*, which I will discuss in detail in the next chapter.

<sup>192</sup> The preceding two sentences are particularly important for Peirce, as will become evident in the final chapter of this dissertation. The received Plato does indeed posit an unchangeable and eternal nature in all objects, but Peirce came to see by 1898—as evidenced by his Cambridge Conference lectures and especially “Philosophy and the Conduct of Life”—that this is not the only possible understanding of Plato nor the best way to develop the development of Plato's thought. The later Plato moved beyond making the Ideas into eternal existences, and already here in Peirce's reading of Plato there is an inkling that the Ideas could be more like “laws of nature” than like existent objects.



(hylé). This is the secondary principle (sunaiton) of the universe. God, the father, implants the seed of the Good in space, the mother, and without his further intervention the Cosmos, the only begotten son of God,<sup>193</sup> made in his likeness, grows up. This is a second blessed god, instinct with Reason. Plato was a political philosopher. He abhorred alike the sway of oligarchy and of democracy, and still more the outcome of the latter, the one-man power—tyranny. He believed in aristocracy supported by an iron socialism. The relations of the sexes should be so regulated as to stop all increase in the population, which should be limited to 5,040 households. Private property and family relations should be abolished. Three classes should be recognized—workmen, soldiers, and lawyers. The education of a lawyer should begin with music, gymnastics, and mathematics. In his thirtieth year, (up to which age he should be seen and not heard) he is to begin the study of dialectic. His education should be completed at the age of fifty, when he is to take his share in the government. The above is an outline of the general views of Plato; many of his special opinions are celebrated. He strongly maintains the immortality and previous existence of the soul.<sup>194</sup> The tie which holds body and soul together is music. Virtue is not natural, nor can it be commanded by the will, but it is the result of discipline. The cardinal virtues are wisdom (sophía), courage (andría), prudence (sophrosúne), and justice (dikaíosúne). The unjust alone prosper; the perfect man would suffer on the

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<sup>193</sup> Phrases like this illustrate the way in which the Platonism received by Peirce was wedded to Christianity.

<sup>194</sup> Again, it might be disputed how strongly Plato holds this, but the Neo-Platonists and later Christian Platonists “celebrated” this “special opinion.” Peirce’s definition of “Platonic” seems to rely heavily on some of the better-known dialogues like the *Republic*, the *Cratylus*, and the *Phaedo*. This is especially evident in his comments on the state, which are derived from some of what Socrates says about the *polis* in the *Republic*, but which are not necessarily the views of Plato.

cross. Reason resides in the head, desire in the abdomen, prophecy<sup>195</sup> in the liver. Time is an image of eternity; it is produced by circular motions. Nature abhors a vacuum. Like attracts like. The constellations and the earth are living divinities. Plato was a mathematician, and is said to have invented the ancient method of analysis. His thoughts constantly show the influence of mathematical studies, and the desire to import mathematically distinct conceptions into philosophy. Aristotle, who was Plato's scholar, declared that the Platonic ideas were numbers.<sup>196</sup> Plato no doubt attributed active virtues to the ideas of One, Two, Three, and Four.

Recall, as I said in the previous chapter, that Peirce held that histories of philosophy intended to be read by Americans should be written in America. In the following chapter, I will show that Peirce held the same was true for dictionary definitions. Peirce's definition of "Platonic" is both a dictionary definition and a brief piece of the history of philosophy, and it is one which is plainly connected to the American Platonism with which Peirce was familiar. At a number of points in this definition, Peirce could be describing Emerson, Henry James, Sr., or Benjamin Peirce. Platonism in this definition is religious, moralistic, and mystical. It full of "special opinions," but lacking in demonstrative argumentation. It is not without merit, but its merit may be more in its literary qualities than in its logical or scientific qualities.

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<sup>195</sup> This threefold division of human faculties may be Peirce's restatement of Plato's tripartite division of the soul in *Republic* IV (440-442). Plato's Socrates discusses the soul as the combination of *logos*, *thumos*, and *EP Ithumia*, usually translated as reason, strength/spirit/courage, and passion. That Peirce should identify passion ( *EP Ithumia*) with prophecy is interesting, and may hint at Peirce's later belief that the late Plato began to grasp the logic of abduction and the metaphysical category of real firstness.

<sup>196</sup> This point gets developed by Peirce in "Philosophy and the Conduct of Life." From this notion of the Platonic Ideas being numbers Peirce finds a way to begin to understand the later Plato as attempting to move towards a three-category metaphysics like Peirce's own.

By the second century AD, Justin Martyr had “Christianized” Platonism,<sup>197</sup> and in the Augustinian tradition, the marriage of Platonism and Christianity was confirmed.<sup>198</sup> The result was that, as James Feibleman says, “Roughly, the first thousand years of Christianity were governed by extreme realism.”<sup>199</sup> That is, European philosophy was imbued with a strong Platonistic tinge by virtue of its religious endorsement. This also ensured that the Platonistic emphasis on morality became enshrined in philosophy.

In Peirce’s youth, Platonism received another “baptism” of sorts through the Transcendentalists. Platonism was already a significant presence in American thought but the Transcendentalists popularized Platonism as mystical idealism in the intellectual milieu of Peirce’s youth. Speaking of Bronson Alcott, Richardson says “Alcott didn’t just read Plato—he believed in Plato.”<sup>200</sup>

As Peirce wrote in a related *Century Dictionary* definition, i.e. of “Socratic,” “The center of [Socrates’] philosophy, as of all those which sprang directly or indirectly from his—that is to say, of all European philosophy down to the rise of modern science—was morality.”<sup>201</sup> In the long run, this meant that Platonism (or at least its Socratic element) frequently took on a more Christian religious character, as can be seen by Peirce’s references to “the only begotten son of God,” and the crucifixion of the truly

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<sup>197</sup> Cf. Émile Bréhier, *The History of Philosophy: The Hellenistic and Roman Age*. Chicago: University of Chicago Press, 1965. (228-231).

<sup>198</sup> Cf. Augustine, *Confessions*, VII.ix. “And thou being desirous first of all to shew unto me how thou resisteth the proud, but givest grace unto the humble; and with what great mercy of thine the way of humility is traced out unto men, in that thy Word was made flesh, and dwelt among men: thou procuredst for me...to see certain books of the Platonists...” (Translated by William Watts in 1631.)

<sup>199</sup> Feibleman, James, *An Introduction to Peirce’s Philosophy*. New York: Harper, 1946. (448).

<sup>200</sup> Richardson, Robert D., Jr. “Liberal Platonism and Transcendentalism: Shaftesbury, Schleiermacher, Emerson.” *Symbiosis: A Journal of Anglo-American Literary Relations*. Plymouth, UK: University College of St. Mark and St. John. Vol 1.1, April, 1997, p.13.

<sup>201</sup> CD, 5476. This is the opinion of Aristotle, received by Peirce. Cf. W.K.C. Guthrie, *The Greek Philosophers From Thales to Aristotle*, London: Methuen & Co, 1950, (86) who makes the same observation. Peirce does not hold this to be the whole of Socrates’ philosophy, as evidenced by his remark about “the true spirit of Socrates” being that of fallibilism in “How to Make Our Ideas Clear.”

just man<sup>202</sup> in his definition of “Platonic.” Peirce might easily have made this connection between Christianity and Platonism in New England, where it is evident in Puritan theology and Ramist logic, but he could just as well have detected it in Augustine or Ficino as in Jonathan Edwards’ Puritanism, Henry James, Sr.’s Swedenborgian mysticism, or Emerson’s Transcendentalism.

Peirce had very little use for absolutist ethics and for moralism in general, especially if the ethical principles put forward served only to put an end to thinking about ethics.<sup>203</sup> As a “political philosopher,” Peirce saw Plato’s conclusions as absurd. Peirce was not a political philosopher, nor was he very much interested in participating in politics. To my knowledge, with the exception of a few of his private letters, nowhere in his writings does Peirce mention the Civil War or its effects on the American political environment. Perhaps this was because the war was too close and too painful to recall, but Peirce also makes very little reference to politics generally, unless it is to mention in a letter or in one of his autobiographies that one of his cousins was a senator or ambassador. Politics simply held no allure for Peirce. He lived his life largely in solitude, especially after marrying Juliette Froissy in 1883. When James asked him to lecture on “Vitaly Important Topics” in 1897, Peirce replied that such topics were of no interest to the philosopher. Peirce wrote to James that “I am not puritan enough to understand the pleasure of these chins on ‘topics of vitally important character.’ The audience had better go home and say their prayers.”<sup>204</sup> In a subsequent letter to James

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<sup>202</sup> Cf. Plato, *Republic*, 361e-362a

<sup>203</sup> Cf. *RLT* 10-11. Also note what he says in “The Fixation of Belief” about inquiry surviving only as long as there exists the irritation of doubt. It is worth comparing this with what Socrates says in the *Theaetetus*, when he rejects language that tries to stop inquiry in favor of language that tries to follow nature in its becomings, 157B.

<sup>204</sup> *RLT* 27.

Peirce elaborated: “where they are Vital there is little chance for philosophy in them and that in the sense in which generalization whether cognitive or sentimental is a high thing, vitally important topics are as I say ‘the outline of huge mountains above which we descry a silvery peak far higher yet.’”<sup>205</sup>

It is also helpful to recall Peirce’s criticism of Henry James, Sr.’s *Secret of Swedenborg*, which I discussed in chapter 2. There he argued that while there was much that is salutary in James’ religious views, they nevertheless lack a logical foundation. Peirce also pointed out that there was nothing in them that was not already found in Plato. These observations help flesh out the comments that frame Peirce’s definition of “Platonic.” His opening comment in his definition of “Platonic” that Plato is revered as much for his literary skill as for his rational thought may well be ironic. In Peirce’s important 1877 essay, “The Fixation of Belief,” Peirce identified Plato as an example of philosophers who fall short of the standard of science and who revere their own opinions too much. Even when he was beginning to appreciate Plato as a logician in 1898, Peirce pointed out that “there is no philosopher in any age who mixes poetry with philosophy with such effrontery as Plato.”<sup>206</sup> It was only much later, when Peirce began to read Plato in Greek, that Peirce recognized that he was mistaken in thinking that Plato was not a logician of the first class. Peirce had relied upon poor translations of Plato and the received tradition of Platonism, but when he read Plato in Greek in the early 1900s he began frequently to remark that Plato had anticipated the whole of Aristotle’s *Organon*.<sup>207</sup> A second comment by Peirce towards the end of his definition underscores

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<sup>205</sup> *RLT* 28.

<sup>206</sup> *EP II*, 38.

<sup>207</sup> For examples of this, see Peirce on Plato’s development of the syllogism in the *Charmides*, *MS* 988; *MS* 434.38 on the development of Plato’s logic; and his 1908 letter to Lady Welby on the *Theaetetus*, for

that at the time of its writing, Peirce attributed Henry James, Sr.'s (and presumably Swedenborg's) lack of logical foundation to their extreme dependence on Plato, whose philosophy is characterized by "special opinions," not by rational arguments.

At the same time, Peirce is very much drawn to Plato's ethics of inquiry. This is perhaps the only place where ethics becomes important to Peirce. For instance, in "How To Make Our Ideas Clear," (the companion essay to "The Fixation of Belief,") Peirce calls his doctrine of fallibilism "the true spirit of Socrates."<sup>208</sup> Socrates, he points out, longed to be proved wrong, and so he carried out his inquiries in community. The community, for Peirce, exists when there is inquiry, and then it exists for the sake of "finding things out."<sup>209</sup> Peirce certainly seems to have been most animated when engaged in such a community. John Jay Chapman wrote to his wife one night after spending hours talking to an enthusiastic Peirce at the Century Club that Peirce was like Socrates in conversation. He ranged across numerous topics, pulled books from shelves to buttress his points, and spoke heatedly. Jay says "eventually we took to speaking in the form of a Socratic dialogue." For both men, he suggests, it was a conscious decision to speak this way. The nature of their conversation, a free and open inquiry into whatever subjects might come to mind, seemed to call for just this sort of Socratic inquiry. It was as plain to Jay and Peirce that this was the right method as it was to the Transcendentalists to embrace Socrates' method when declaring their self-reliance. After all, such was the environment in which Peirce claims to have been raised.

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instance. Also my notes on "Plato as logician." Contrast this with his early *Century Dictionary* entry on Aristotle, p. 310; where he admits that there were only "rudimentary" developments in logic before Aristotle.

<sup>208</sup> This is to be contrasted with Peirce's statement in the earlier part of that essay, "The Fixation of Belief," that Plato was not a scientific thinker but an *apriorist*.

<sup>209</sup> This is from Peirce's autobiographical introduction to a proposed book, written in 1898. He says there that science is the "pursuit of those who are consumed by a desire to find things out."

## Lutoslawski's Logical Plato

In his reading of the history of philosophy, and in particular in his reading of Lutoslawski, Peirce was able to give a logical account of what was attractive in Platonism, and to embrace it as his own. Peirce had previously resisted this Platonistic strain as illogical, mystical, and unscientific, but found himself constantly drawn to several facets of Plato's thought. For example, in reading Plato Peirce made one of his earliest articulations of the Pragmatic maxim.<sup>210</sup> Plato's emphasis on the dialogic character of philosophy and of all thought appealed to Peirce as being fundamentally correct. The method and ethics of inquiry exemplified in Plato's Socrates was also attractive, especially as it attempted to mediate between opposing nominalistic extremes by positing some version of metaphysical realism. But these positives were commingled with the "effrontery" of poetry, married to mystical religion and religious dogmatism that closed off the path of inquiry, and, at least in the received tradition of Platonism, frequently tied to a nominalistic Platonistic metaphysics that denied the reality of relations and also barred certain forms of inquiry.

Broadly, Platonic philosophy takes its cues from Plato's dialogues, and especially from the methods and practices of Plato's Socrates who, in Plato's dialogues, has traditionally been taken as Plato's spokesman. These cues include the attempt to discover the real Forms or Ideas of things that underlie their existence or appearance, and the accompanying belief that the best life one can live entails gaining familiarity with these Ideas. Socrates' frequent method of inquiry into the Ideas is dialectical, inductive, and elenctic. By this I mean that most of his inquiries take place in conversation, beginning

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<sup>210</sup> MS 988, in the section on *Theaetetus*.

with experience to provide a plausible account or likely story, and then attempting to refute that account. Whatever resists refutation is left standing as a credible and likely account. The nature of the Ideas has been a subject of frequent dispute among Platonists, and it is not even clear from the dialogues of Plato that there is a consistent and coherent doctrine of Ideas. There is however a strong strain of metaphysical thought in Western philosophy that corresponds to this metaphysical division of the world into appearance and reality, and to the epistemology and ethics that accompany it.

As far as Peirce was concerned, Plato's dialogues seemed to demonstrate that Plato was more concerned with "poetry" than with logic. As I've already noted, Peirce wrote that "There is no philosopher of any age who mixes poetry with philosophy with such effrontery as Plato. Is Robert Browning within a mile of doing so?"<sup>211</sup> This impression was likely formed both in his early studies of Greek at Harvard and in his reading of Emerson and Coleridge,<sup>212</sup> for whom Plato's thought exemplified the Romantic ideals of self-reliance, individualism, and a mystical or poetic grasp of the world. For the Transcendentalists, and especially for Emerson, each of these ideals bears a necessary connection to the others. In presupposing a transcendent object of knowledge, mysticism brings with it an individualistic epistemology that gives preference to the individual's perceptions. When knowledge is thus made into a private affair, there is little room for scientific investigation by a community of observers. In one of his college essays on Emerson, Peirce wrote, "Emerson is a gem."<sup>213</sup> The phrase evinces admiration for Emerson's thought and for the beauty of his prose. Peirce's admiration is

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<sup>211</sup> *EP II*, 38.

<sup>212</sup> There are among Peirce's *MSS* some of his college papers in which he writes on Coleridge, and he makes fairly frequent reference to Emerson in his autobiographies, as will become plain later in this chapter.

<sup>213</sup> *MS* 1633.



tempered, however, by his comparison of Emerson to those who prefer action to poetic openness to mystical vision. Those who, unlike Emerson and like Edward Everett, are possessed of “action, utterance, and the power of speech to stir men’s blood” are “gem-cutters.”<sup>214</sup> In the same essay, Peirce writes that Emerson “does men great service just by opening himself to them.”<sup>215</sup> We may speculate about what service this is. Emerson’s preference for his own inner vision is like the preference of the “*a priorists*” Peirce speaks of in the “Fixation of Belief.” They hope to resolve disagreements among thinkers by appeal to what is “agreeable to reason.”<sup>216</sup> Peirce says this “does not mean that which agrees with experience, but that which we find ourselves inclined to believe.”<sup>217</sup> The first example Peirce gives of this kind of thinker is, incidentally, Plato. As a mystical *a priorist*, Emerson is at fault when he mistakes his own intellectual inclinations for the truth. On the other hand, his “self-opening” arises out of the very social impulse that serves to correct and guide scientific inquiry. Furthermore, while the Transcendentalists are mistaken in their epistemology, they are only halfway mistaken. Their mysticism is not wholly false, but is really a misnomer for abduction, or the logic of making guesses, without which science cannot proceed. What Emerson and Plato find to be generally true of thought and of the world is likely to be at least partly true. Emerson cannot be called scientific in his mysticism. However, his mysticism parallels the beginnings of science, and his writing and speaking are implicit appeals—perhaps unrecognized as such by Emerson—to the fact that inquiry ought to occur in community.

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<sup>214</sup> *MS* 1633.

<sup>215</sup> *MS* 1633.

<sup>216</sup> *EP* I, 119.

<sup>217</sup> *EP* I, 119.

For Peirce, the dialogues also seemed to lack consistency, both internally and in terms of the whole Platonic corpus. Each takes up some issue that is rarely resolved, and the Platonic doctrines of metaphysics, ethics, epistemology, politics, or logic that may perhaps be gleaned from the dialogues are not always in agreement with one another. Peirce described this historical process of gleaning as the pursuit of “gems of thought” in Plato. Philosophers and theologians made selective appeal to Plato’s dialogues, or else drew on other, more consistent traditions of Platonism. The mysticism of Socrates, evinced by his frequent appeal to a prophetic or mantic spirit and his habit of ending conversations by telling myths about the immortality of the soul, evidently struck Peirce as a poor excuse for rational investigations. As I showed in the previous chapter, Peirce admired a similar form of mysticism in Henry James, Sr., but was not able to endorse it since it lacked demonstration. As for Plato’s metaphysics, Peirce argued in “Philosophy and the Conduct of Life” that because Plato’s metaphysics denied the reality of materially existent objects, this prevented him from engaging in empirical investigations.

Lutoslawski argued that this view of Platonism as a scattered set of poorly related doctrines embedded in an unclear story of the life of Socrates depended on the erroneous assumption that Plato’s thought did not develop over time. That is, the received tradition of Platonism resulted from scholars either choosing to arrange the dialogues according to their internal chronology, or else approaching them as prospectors looking for what gems might appear in their jumbled midst. Following Lewis Campbell’s early attempts at a scientific textual analysis, Lutoslawski proposed arranging the texts according to stylometry. Lutoslawski correlated several hundred regional words and phrases in Plato’s dialogues with what was known about Plato’s travels. Assuming that Plato began to use

certain phrases only when he lived in a region where their use was common, Lutoslawski was able to re-arrange the dialogues in a way that made sense of certain perceived inconsistencies in Plato's metaphysics. Peirce was drawn to stylometry as a scientific method of dating, and began an intense investigation into Plato's biography and into the Greek text of the dialogues in order to check Lutoslawski's data.

Peirce found the method attractive because it was scientific in its empiricism and in its attention to synechism. Peirce took up Lutoslawski's experiment, filling dozens of pages with his own calculations that almost exactly corresponded with Lutoslawski's results. Lutoslawski's assumption that Plato would use words only when he was exposed to them in his environment corresponds with Peirce's idea of synechism, i.e. that our thoughts and language are not wholly our own, but are to a large degree attributable to environmental influences.

This method of dating the dialogues is still partly controversial, and scholarship on dating the dialogues falls roughly into three camps. Leonard Brandwood argues that stylometry is essentially uncontroversial.<sup>218</sup> The data are strong enough to give at least a likely order of the composition of the dialogues. Only in a few cases is it unclear how to order the dialogues. For instance, the data on the *Parmenides* and the *Sophist* yield nearly identical dates for the dialogues. On Brandwood's account, like those of Campbell and Lutoslawski, the data suggest three periods of Plato's writing: the early Socratic dialogues, in which Socrates' method of inquiry is developed, comes first. Next come the dialogues that argue for some theory of Forms, followed by the *Parmenides* and Plato's apparent abandonment of the Forms.

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<sup>218</sup> Brandwood, Leonard. *The Chronology of Plato's Dialogues*. Cambridge: Cambridge University Press, 1990. Also see his article on stylometry in Kraut, Richard (ed.) *Cambridge Companion to Plato*. Cambridge: Cambridge University Press, 1993

Other scholars, notably Deborah Nails and Holger Thesleff, argue that since stylometry offers only a probabilistic account of the dates of composition, very little weight should be assigned to it. Thesleff in particular argues for a more or less consistent two-level metaphysics throughout Plato's lifetime.<sup>219</sup>

The third group of scholars are those who also discount the stylometric data and who argue that no consistent philosophical system emerges from Plato's dialogues. Drew Hyland, Stanley Rosen, and John Sallis, for instance, argue that in Plato there is no "theory of the Forms."<sup>220</sup>

The difference between these three accounts seems to hinge not so much on questions about the value and reliability of the stylometric analyses as on the resultant metaphysics. Most agree that stylometry is of some limited value (and many think it is of great value) in arranging the dialogues. What concerned Peirce, and what should still concern us, is that we not decide the value of a method of inquiry on the basis of our liking or disliking of the results it provides or on the basis of our prejudicial commitment to some position about metaphysics. In the absence of some more reliable means of arranging the dialogues, Peirce embraced stylometry as an appropriately unbiased way of approaching the development of Plato's thought. I should qualify that statement by saying that this method, like all methods, has its biases, and Peirce was drawn to a method that allowed scholars to observe the development of Plato's thought, and that assumed that such development could have happened.

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<sup>219</sup> Cf. Thesleff, Holger, *Studies in Platonic Chronology*. Helsinki: Societas Scientiarum Fennica, 1982, and Thesleff, Holger, *Studies in Plato's Two-Level Model*. Helsinki: Societas Scientiarum Fennica, 1999.

<sup>220</sup> Hyland makes and substantiates this claim about himself, Sallis and Rosen in his article, "Against a Platonic 'Theory' of Forms," in Welton, William A., *Plato's Forms: Varieties of Interpretation*. Lanham: Lexington Books, 2002. 257-272.

In its emphasis on the *development* of Plato's logic, Lutoslawski's book allowed Peirce to consider Plato anew as a serious logician. Lutoslawski indicated that some of the technical vocabulary of formal logic that Peirce had assumed to originate in Aristotle is actually present in Plato's Greek text, though it is rarely translated as such. For example, after reading Lutoslawski, Peirce mentioned in several of his writings how the *Charmides* contains a regular syllogism in *cesare*, identified by Plato using the term "syllogism." Moreover, Plato's logic could be seen as the product of a long development. The received version of Plato indicated that Plato, through Socrates, endorsed the pursuit of pure Ideas or Forms which somehow existed in another realm, and which were the locus of reality. Peirce said in "Philosophy and the Conduct of Life" that Plato made the error of making the whole aim of philosophy to be making the acquaintance of these pure Forms. In his review of Fraser's version of Berkeley's works, Peirce argued that Berkeley's system rested on an unacceptable nominalistic version of the Forms. Lutoslawski's redating of the dialogues placed those dialogues that are concerned with the Forms in the early and middle periods of Plato's work. Lutoslawski placed the *Parmenides*, which features a young Socrates and which contains Plato's sharpest challenges to the legitimacy of his own Forms, after all these middle dialogues. After these came the *Sophist* and the *Theaetetus*, which do not concern themselves with the Forms. In this historical context Peirce could see the received Platonistic dogmas that later Platonists endorsed as mere moments abstracted from Plato's lifetime of thought, taken out of context. After reading Lutoslawski, Peirce's sense was that what was important in Platonism was not a static theory of forms, nor the peculiar mysticism of Socrates, nor the "poetry" of the dialogues.

Indeed, what became important was being able to see how all three of these elements fit together as a whole in Plato's thought. Each had been present in Peirce's intellectual environment. The mysticism was directly present in the Transcendentalists like Henry James, Sr., Emerson, and Thoreau, but it was also present historically in Boehme, Edwards, Augustine, and Plotinus, and in their intellectual heritage. The metaphysical notion of the Forms had become transmogrified into static and eternal Laws of Nature that had become the object of scientific inquiry. More importantly, the constant suggestions in Plato (especially in the later Plato) that the Forms were to be understood in some evolutionary scheme,<sup>221</sup> was present in the logic of Ramus, which played an important role in shaping early American thought.<sup>222</sup> What ties the mysticism together with the metaphysics are the ideas that all thought is in dialogue and that all thought is in signs. Peirce had, early in his life, gotten the idea from Plato's *Theaetetus* that all thought is in the form of an inner dialogue. Socratic mysticism, exhibited in his habit of making guesses about "likely stories," began to look like Plato's attempt at describing a logic of abduction. If these guesses are to have any purchase in the world, then the signs that comprise thought are connected to what is real, and what is real evolves. If, as Darwin suggested in his 1859 *Origin of Species*, nature may be understood as evolutionary, then the logic by which we investigate nature must also be evolutionary. Now that he had identified this evolutionary strain in the late Plato, Peirce was able to turn to Plato for help in developing such a logic. What became important then

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<sup>221</sup> I will discuss this in a little more detail in chapters four and five. It is not so much biological evolution that appears in Plato as Socrates' emphasis on the importance of the growth of the individual, the growth of ideas, and the development of language.

<sup>222</sup> See Trufant, Laurel Warren. *Metaphors in the Construction of Theory: Ramus, Peirce, and the American Mind*. (Ph.D. Thesis, University of New Hampshire, 1990.) Ann Arbor: UMI, 1991; and the first chapter of Herbert Schneider's *A History of American Philosophy*, 2<sup>nd</sup> ed. New York: Columbia University Press, 1963.

was not Platonism as a finished set of inflexible doctrines about Forms but as a method of inquiry and a concomitant developmental realism.

I will end this chapter by talking about Peirce's eventual re-discovery of Socrates' method of inquiry. Late in his career Peirce explicitly affirmed Plato's Socrates as scientific, something he only hinted at in his "How to Make Our Ideas Clear."

### **Peirce's Translation of the *Apology* and Ransdell on the Socratic**

I have been arguing that Peirce's intellectual environment was one strongly influenced by the mystical Platonism of the Transcendentalists. In his earlier years Peirce was put off by this, but he did not reject it outright. In this final section I will argue that Peirce's modification of Transcendentalist ideals –as, for instance, in his "Neglected Argument for the Reality of God," in his "objective idealism," and in his reconciliation of Aristotle and Plato, are indicative of a broader plan of embracing a modified version of the mystical Platonism of the Transcendentalists.

In the next chapter I will discuss Peirce's translations of Plato's *Cratylus*. Here I would like to focus on his translation of part of Plato's *Apology of Socrates*.

Peirce's translation was only partial. He first wrote out the Greek text of the dialogue, in black ink, on numbered pages, leaving ample space after each line for a translation. Then he wrote his translation in the space after each line, in green ink. It is not clear why Peirce did not complete the translation, although it was not uncommon for him to begin projects and not finish them. Lacking other information, all I can do is to speculate about Peirce's intentions. His translation is not, in itself, particularly striking. What is striking is where he chose to stop. He translated up to the point at which Socrates claims that his fellow citizens are unwise, and then confesses his own ignorance.

Benjamin Jowett's popular translation of this passage has Socrates say, "I neither know nor think that I know [anything about what is beautiful or good.]" (21d) This is an unfortunate translation, because it is erroneous. I will add that Peirce was familiar with Jowett's translation but not with the Greek text. Only when he came to this passage in his own translation would Peirce recognize that Socrates' actual words are that he does not claim to know what he does not know. (Peirce wrote out the Greek of this line but stopped his translation just short of it.) Jowett's translation makes Socrates claim that knowledge is unattainable through research, when in fact Socrates only makes the humble claim that he will not profess to know what he does not know. The difference between these claims amounts to the difference between radical skepticism and pragmatism. Peirce may well have stopped translating at this point simply in order to reflect on the importance of this new version of Socrates' epistemology.

The significance of this may be seen by considering what Joseph Ransdell has written about Peirce as heir to the Socratic tradition.<sup>223</sup> Ransdell's position is that "there is a philosophical tradition that can be identified as distinctively Socratic, which had no major heirs after Plato until Peirce." Ransdell's thinking about Plato and Peirce, then, begins with and focuses on the Socratic elements of Peirce's thinking, where "Socrates" refers exclusively to the Socrates of Plato. A summary of Ransdell's argument is as follows: The Socratic tradition of *elenchos* begins not with logical norms but with the moral norms of toleration, sincerity, trust and integrity. To wit: the object of inquiry must be treated with respect (toleration); real doubt arises not in skeptical dialectic but in self-contradiction (sincerity), and the resulting *aporia*, if sustained and not dismissed

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<sup>223</sup> Ransdell, Joseph, "Peirce and the Socratic Tradition," *Transactions of the Charles S. Peirce Society*, (Summer 2000), XXXVI, 3:341-356.



(trust), makes the inquirer aware of the impasse and thus opens him up to the possibility of new and enlightening information. This only occurs with patience. Such a method of inquiry leads to the truth only when pursued in a community which is marked by sincerity, trust, concern for logic and good communicative practices. No individual has the “god’s-eye view,” i.e. the full truth concerning the cosmos, but all scientific views reveal different facets of reality. The brute object impresses its form on the perceiver; the community of perceivers communicate about this and develop an increasingly refined and sophisticated understanding, until doubt is assuaged, the particular *aporia* loses its force, and acceptance (as truth) of findings ensues. Along the lines of what I have just said concerning Jowett’s unfortunate translation, Ransdell points out that Socrates does not ever claim total ignorance. Rather, Socrates, displaying proper scientific fallibilism, says that he does not think he knows what he does not know. In Peirce, this Socratic ethics of inquiry appears as a denial of intuition and an affirmation of fallibilism and an emphasis on the importance of community.

The “Socratic” needs to be distinguished as a method of inquiry from that of the mystical Socrates embraced by Emerson. The chief difference is that the Transcendentalists use Socrates and his method as a justification for individualism and mysticism. The individualism is partly right, inasmuch as the inner dialogue is important; the mysticism is partly right inasmuch as the hypothetical is important. But taken alone, both are mistaken. Socrates does not underwrite cults of individuality. Rather, his fallibilism argues for real objects of inquiry that constrain investigations; his hypothetical “likely stories” are an example of abductive inference and the proper

scientific method of investigating such hypotheses; and the dialogue-element of each of the inquiries illustrate the importance of community in inquiry.

Peirce's re-reading of Plato began to show him that within Plato's dialogues the tools to correct some of Platonism's excesses were already present. That Peirce was aware of this in 1892 when he wrote "The Law of Mind" is plain from the fact that he precedes the quotation with which I prefaced this chapter by speaking of his own "Schelling-fashioned idealism which holds matter to be mere specialized and partially deadened mind." Peirce calls himself a Schellingian immediately before lamenting the influence of Schelling and other Platonist idealists. The Platonist Transcendentalists were always at least partly right about mysticism, idealism, monism, and individualism. Mysticism and idealism are suggestive of the logic of abduction, which serves to correct the notion that "reason" has no connection to logic. Emerson's mystical claims that the universe is alive and that it speaks to those who listen is not too far from Peirce's "Schelling-fashioned idealism" and synechism. The individualism that the Transcendentalists espoused as a reaction against materialism is right as well, provided it be understood as fallibilism, not as Protagorean relativism. In each case, Transcendentalism fails not because it is wholly off-base, but only because it has not given consideration to logic, and this effectively derails inquiry by removing that which ties the community of inquiry together.

In the final third of his career, Platonistic mysticism, delivered to Peirce through American Transcendentalism and modified by Lutoslawski's exposition of Plato's fallibilistic logic, helped Peirce develop his categories. Joseph Esposito suggests that Peirce developed his three categories in three sequential, roughly eighteen-year periods,

beginning with Thirdness, then moving through Secondness and Firstness.<sup>224</sup> Esposito's essay does not delve into the Peirce-Platonism issue in any great depth, but the last few paragraphs address the "early years of [the 20<sup>th</sup>] century" (p. 59ff). Esposito concludes that Peirce's category of Firstness receives its full development late in Peirce's philosophical career and that in the years 1900-1903 Peirce "rekindled his half-century love affair with Plato" and developed his cosmology along the lines of "some form of Platonism." Among the key developments Esposito identifies in this period are a strengthened realism; the growth of a "dialectical dimension" to Peirce's historical cosmology; and a shift in Peirce's pragmatism from the process of clarifying ideas to "a method whereby inquirers become subject to the controlling influence of 'living' Ideas."<sup>225</sup> In other words, Esposito sees this period as the time when pragmatism moves from being a method of inquiry towards being a full-orbed metaphysical system, albeit one which, according to Esposito, Peirce was never able to complete. Had he completed it, Esposito suggests, his means to doing so would have been through fully embracing "the evolutionary Platonism he had kept so long in the background."<sup>226</sup>

### **How could Peirce the Aristotelian be a Platonist?**

Did Peirce embrace this Platonism? I have been claiming a Platonistic heritage for Peirce's thought, but it might be argued that Peirce was an Aristotelian, not a Platonist. After all, Peirce frequently called himself an Aristotelian, but never seems to

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<sup>224</sup> Max Fisch also suggests in "Peirce's Arisbe" that the development of Peirce's thought can be divided into three periods. Though Fisch suggests a different division of periods, he agrees that Peirce was, after 1889, especially concerned with the development and defense of his category of Firstness. Deledalle and others also mark off Peirce's thought into three periods, but the division of periods is not a matter of exact agreement.

<sup>225</sup> Esposito, Joseph L. "The Development of Peirce's Categories," *Transactions of the Charles S. Peirce Society*, (Winter 1979) XV, 1:59-60.

<sup>226</sup> Esposito, 1979. p. 60.

have called himself a Platonist, at least not directly. For instance, in his first Cambridge Conference Lecture in 1898, “Philosophy and the Conduct of Life,” Peirce said to his audience, “Now, Gentlemen, it behooves me, at the outset...to confess to you that...I stand before you an Aristotelian and a scientific man, condemning with the whole strength of conviction the Hellenic tendency to mingle Philosophy and Practice.”<sup>227</sup> Later, in his fourth 1903 Harvard Lecture on Pragmatism, “The Seven Systems of Metaphysics,” Peirce stated that he “should call myself an Aristotelian of the scholastic wing, approaching Scotism, but going much further in the direction of scholastic realism.”<sup>228</sup>

In reply, I will simply point out that in Peirce’s mind the relation between Aristotelianism and Platonism changed over the course of his life, and was not a simple matter of allegiance to one school or the other. Peirce’s affirmation of Aristotelianism consisted chiefly in these three things: Aristotle’s empiricism, Aristotle’s articulation of logic in the *Organon*, and what Peirce perceived as Aristotle’s unwillingness to let the outcomes of his investigations be biased in advance by his moral preconceptions.

While Peirce did call himself an Aristotelian, he also eventually came to view Aristotelianism as a special subset of Platonism,<sup>229</sup> just as Muirhead did. For instance, in “The Seven Systems of Metaphysics” he spoke of “the Platonic philosophy of which Aristotelianism is a special development.” In this lecture, he identified both Aristotelianism and Platonism as systems that have traditionally been understood as only recognizing “two grades of being,” but which ought really to be thought of as recognizing

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<sup>227</sup> *EP II*, 29.

<sup>228</sup> *EP II*, 180.

<sup>229</sup> *EP II*, 180.

“all [three of] the categories [that] need at once to be subdivided.”<sup>230</sup> Later, in his 1907 essay “Pragmatism,” Peirce said that “the rivulets at the head of the river of pragmatism are easily traced back to almost any desired antiquity. Socrates bathed in these waters. Aristotle rejoices when he can find them.”<sup>231</sup>

Traditionally, Aristotle’s empiricism stood in contrast to what Heinrich Dörrie has called the “ontological priority of the intelligible to the sensible” that characterizes Neo-Platonism.<sup>232</sup> For much of his life, Peirce viewed this prioritization of the intelligible through the lens of the Transcendentalists’ prioritization of what he calls Plato’s “special opinions” in his definition of “Platonic.” He saw this as illogical mysticism, or as a preference for the lessons of abduction without attention to the empirical and deductive testing that all abductions require before they can be accepted by the scientific community. This may be seen in Peirce’s early labeling of the third part of the Platonic division of the soul as the seat of prophecy.<sup>233</sup> Later, Peirce came to view Aristotle’s empiricism as a “special development” of the method of Socrates,<sup>234</sup> and took Plato to be, in fact, the most scientific of philosophers. He wrote in “Philosophy and the Conduct of Life,” “Now in minor particulars I am hostile to Plato....But in regard to the general conception of what the ultimate purpose and importance of science consists in, no philosopher who ever lived, ever brought that out more clearly than this early scientific philosopher.”<sup>235</sup>

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<sup>230</sup> *EP II*, 180.

<sup>231</sup> *EP II*, 399.

<sup>232</sup> Heinrich Dörrie, *Der Platonismus in der Antike*. Cited in Lloyd Gerson, “The Study of Neo-Platonism Today,” in the *Journal of the International Plato Society*, Issue 2, online. <http://www.nd.edu/~plato/plato2issue/gerson.htm>

<sup>233</sup> See his definition of “Platonic,” below.

<sup>234</sup> *EP II*, 180.

<sup>235</sup> *EP II*, 37.

As long as Plato's thought was only viewed as a jumbled trove of "gems of thought," all that could be said of Plato's method of science is whatever general impressions of his methods that might arise from a broad survey of the dialogues. With the chronologization of the dialogues Peirce could see the development of Plato's metaphysics as the result of a sort of "empirical" testing of ideas in community. Peirce could then affirm with Lutoslawski that "It was a natural consequence of the extension of detailed investigations that Plato began to think more highly of experience [in his mature philosophy] than he did at the time when still inebriated with the discovery of absolute ideas....he knows that the truth is reached through bitter experience..."<sup>236</sup>

As for Aristotle's logic, Peirce read Aristotle more closely both because Aristotle's *Organon* explicitly attempts to analyze and organize logic (while Plato's work does not), and because commentators on Aristotle made much of this distinction. Much as his view of Philodemus' logic changed when he read the original texts, when Peirce began to read Plato on his own, his opinion of Plato as a logician changed greatly, and he began to see Aristotle's logic as dependent on Plato's logic.

Peirce's rehabilitation of Plato anticipates some more recent thought concerning Neo-Platonism. For instance, Lloyd Gerson has written recently that Platonism is not what Plato said, but is a study along the lines of Plato's thought. Much of what the Platonists and the so-called Neo-Platonists wrote has never been translated. Most of it is commentary on Aristotle; and most of the ancient commentators on Aristotle were Neo-

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<sup>236</sup> Lutoslawski, *Origin and Growth of Plato's Logic*, 427-8.

Platonists. The philosophies of Aristotle and Plato are considered by most Neo-Platonists to be in harmony with one another, but not identical.<sup>237</sup>

Peirce's recognition of the proximity of Plato's thought to that of Aristotle is also an historical position. Gerson says, "One of the central principles of Aristotelian interpretation held by all the commentators was that Aristotle's philosophy was in harmony with the philosophy of Plato."<sup>238</sup> Gerson is speaking of the early Neo-Platonists, but by the end of the Middle Ages this sense of harmony was lost. Peirce's re-reading of Aristotle may be understood as an attempt to rehabilitate this older view.

Peirce's early view of the philosophies of Plato and Aristotle was that Plato's thought was more poetic while Aristotle's was more mathematical and logical. Peirce's view of Plato as poetic is not original. This contrast is plain in the quotation from "The Law of Mind" above. The Platonistic idealists he names as being among his intellectual influences have been filtered through mathematical conceptions of his empirical laboratory training and his Aristotelian logic. As Peirce's reading of Plato matured, so did his understanding of the relation of mathematics to Plato's thought. "The typical Pure Mathematician is a sort of Platonist," Peirce said, suggesting that Plato's maturest understanding of the Forms made them out to be of the nature of numbers, not of eternal verities.<sup>239</sup> Speaking of Plato, Peirce wrote, "Thus at last, the Platonic Ideas became Mathematical Essences, not possessed of Actual Existence but only of a Potential Being quite as *Real*, and his maturest philosophy became welded into mathematics."<sup>240</sup>

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<sup>237</sup> "The Study of Neo-Platonism Today," by Lloyd P. Gerson, *Journal of the International Plato Society*, Issue 2, online. <http://www.nd.edu/~plato/plato2issue/gerson.htm>.

<sup>238</sup> Gerson, *ibid*.

<sup>239</sup> *EP II*, 40.

<sup>240</sup> *EP II*, 35.

I will discuss this evolution of the Forms in more detail in chapter five. Meanwhile, one other “mental [auto]biography” by Peirce merits mention here. As I mentioned in chapter one, in 1909 and 1910 Peirce exchanged letters with Samuel Barnett, a professor of mathematics at the University of Georgia. Barnett had written to Peirce asking about the logic of probability. In one letter, dated 20 December of 1909, Peirce gave a lengthy “mental autobiography.” It appears that his reason for doing so was an odd appeal to the authority of maturity, intended to impress upon Barnett Peirce’s own fitness for studying induction, and the youthful Barnett’s comparative unfitness. Several facets of this letter are striking, especially his mention of the logical importance of the dialogues of Plato. Peirce wrote

I had read a little Plato but had quite failed to appreciate the logical importance of the Dialogues which I subsequently made a very thorough reading & study of & made out (what is very important) the chronology of them by applying mathematical principles to the facts given in Lutoslawski’s book and trusting to the substantial accuracy of the statements in the tenth Epistle as well as to what is reported on the authority of Hermogenes (or whatever his name is. My memory for names is bad.)

Peirce then added, almost as an aside, that he had read Aristotle and some others. No philosopher merits as great attention in this letter as does Plato. This may be partly attributed to the fact that Barnett wrote to Peirce about probability and Peirce’s study of Plato was one in which mathematics and probability figured prominently. Even so, it is a



radical departure from his statements in *MSS* 1604 and 1605 that he had no interest in Plato. Another interesting point in this letter, which I will discuss in more detail in chapter five, is Peirce's discussion of realism, and the splitting of reality into three categories. Peirce seems to have in mind the "self-misunderstanding" of Plato that he mentions in "Philosophy and the Conduct of Life," wherein Plato treats his Ideas as though they were both Peircean firsts and thirds.

Plato's greatest errors were failures to understand the implications of his own thought. Peirce argues, however, that mathematics and science owe significant debts to Plato. Peirce's mature philosophy recognized that while Aristotle was instrumental in articulating many of its terms, science and logic were nevertheless present in more than germinal form in Plato's dialogues.

I said just a moment ago that Peirce anticipated some of the more recent treatments of Plato in contemporary philosophy. Let me close this chapter with the observation that this anticipation is also a re-working of Emerson's claim that "Aristotle Platonizes."<sup>241</sup> In his "Circles," Emerson articulates a vision of the world that presages Peirce's synechism and that echoes one of the main points of what Ransdell calls the Socratic. Emerson says "the life of man is a self-evolving circle, which, from a ring imperceptibly small, rushes on all sides outwards to new and larger circles, and that without end."<sup>242</sup> Knowledge grows as our ability to perceive—to draw larger circles to enclose what can be known—grows. We seek to fix our beliefs, to make our knowledge stand still, by drawing boundaries and dichotomies. "Aristotle and Plato are reckoned the

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<sup>241</sup> R. W. Emerson, "Circles," *Essays, First Series*, 271.

<sup>242</sup> "Circles," 267.

respective heads of two schools. A wise man will see that Aristotle Platonizes.”<sup>243</sup>

Emerson wants to draw Plato and Aristotle together under the aspect of eternity. His claim is that if we were able to see as God sees, we would know that all the great minds are contemplating the same thing, albeit from different perspectives. “Permanence is but a word of degrees. Our globe seen by God, is a transparent law, not a mass of facts.”<sup>244</sup>

Peirce, as a scientist, is not so ready to dispense with the facts. The Socratic method of inquiry will not permit it, if only because it insists that, however God may see things, we have not got what Ransdell calls the “God’s-eye point of view.” On the other hand, Peirce cannot dispense with Emerson either. Emerson is, unwittingly perhaps, speaking as a scientist: knowledge grows with inquiry, and the absolute fixation of belief is the mortal enemy of the growth of knowledge. Instead, as I have already begun to show, and as I will show in the next two chapters, Peirce discovers within Plato the logical means to preserve Plato’s scientific impulses while liberating Platonism from its frequent bondage to some “monstrous mysticism of the east.”

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<sup>243</sup> “Circles,” 271.

<sup>244</sup> “Circles,” 266.

## Chapter 4: *Phusis* and *Logos*: Peirce and Plato's *Cratylus*

Almost every one of Plato's dialogues is a sort of palimpsest: there is one professed subject, while lying beneath that is a faintly traced thought far more general and at the same time more practically important, of which, perhaps, no word is overtly spoken. It is so with the *Cratylus*. Language is its explicit subject, but appearance and the nature of the underlying reality is what the writer is thinking on all the while.<sup>245</sup>

Charles Peirce

This dialogue [*i.e.* the *Cratylus*] is more scientific than all those that precede it.<sup>246</sup>

Charles Peirce

And thus it was from the Greeks that philosophy took its rise: its very name refuses to be translated into foreign speech.<sup>247</sup>

Diogenes Laertius

However, Peirce was braver than Plato, and was courageous enough to go back to the Cave and liberate his fellow-prisoners, not by helping them to escape, but by introducing into the Cave the freedom of reasoning and of analyzing Being into the categories of the Cave: Possibility (Firstness) of Being ... (Secondness), according to Condition, *i.e.* contextuality of the Cave, laws (of inference) (thirdness). Plato seems to describe Peirce's venture in the following passage of *The Republic*: '[...] suppose that he had again to take part with the prisoners there in the old contest of distinguishing between the shadows, while his sight was confused and before his eyes had got steady (and it might take them quite a considerable time to get used to the darkness), would not men laugh at him, and say that having gone up above he had come back with his sight ruined, so that it was not worthwhile even to go up? And do you not think that they would kill him who tried to release them and bear them up, if they could not lay hands on him, and slay him?' (Plato 1942: 209-210). They tried and did not succeed....Semiotics is the story of Plato back in the Cave.<sup>248</sup>

Gérard Deledalle

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<sup>245</sup> MS 434.45 (Logic IV).

<sup>246</sup> MS 974.13.

<sup>247</sup> Diogenes Laertius, *Lives of the Eminent Philosophers* I.4; tr. R.D. Hicks. Cited (as epigram) in Joseph Owens, C.Ss. R., *A History of Ancient Western Philosophy*. New York: Appleton Century Crofts, Inc, 1959. p. xvii.

<sup>248</sup> G. Deledalle, *Charles S. Peirce's Philosophy of Signs: Essays in Comparative Semiotics*. Bloomington and Indianapolis: Indiana University Press, 2000., p. 132.

## Introduction

Given the importance of semiotics for all of Peirce's philosophy, it is not surprising that Plato's *Cratylus* should be of great interest to Peirce. After all, the *Cratylus* indicates at its outset that its concern will be with the nature and function of names (or verbal signs). The *Cratylus* is *prima facie* concerned with semiotics. Moreover, for Peirce, all of Plato's dialogues (and especially the *Cratylus*) are palimpsests. Palimpsests are texts that have been scraped clean to make room for new texts. The old texts were considered obsolete and so were erased, but they left an indelible remainder, one that, from an historical perspective, is often quite valuable. Their real significance often lies below the surface of what is immediately presented to the reader. Below the *Cratylus*' surface interest in whether names are natural or conventional lies a concern with the nature of the things that words connect us to. The *Cratylus* is, then, at once a dialogue about semiotics and metaphysics. That is, it is a dialogue about *semiosis* and *phusis*, about linguistic sign-making and its relationship to "underlying nature."

In this chapter I hope to contribute to our understanding of Peirce's semiotics by filling in a missing piece of the story of its development. In previous chapters I have made the case generally that Plato was an important influence on Peirce's thought. In what follows I will begin by making the case for the importance of the *Cratylus* to Peirce, as evidenced by Peirce's writings on the *Cratylus*. Next I will give a very brief overview of Plato's text. I will follow this with a look at Peirce's main commentaries on and translations of the *Cratylus*. From these commentaries it is evident that Peirce saw Plato

as engaged in a project not wholly unlike his own. Plato thus provides Peirce with a model for inquiry into how human language is connected to scientific inquiry. The development of language in historical communities is itself a sign of the historical development of natural reality as cosmic habits. The Protagorean *homo mensura* principle is therefore partly, but only partly, right.<sup>249</sup> Language is plastic and subject to evolution, but it also presupposes both the real objects that it signifies, and a community in which real relations obtain.

### **The importance of the *Cratylus* for Peirce**

If the importance Peirce placed on others' particular philosophical writings can be gauged by the frequency with which Peirce refers to them in his writings, then the *Cratylus* must not rank very highly. Peirce refers to it in only half a dozen or so places, and some of those references are quite brief. As nearly as I can tell, most of them date from late in his career, after 1898.

This consideration is counterbalanced, however, by the esteem accorded to the *Cratylus* in this handful of texts. For instance, two of the manuscripts (MSS 986 and 1161) are partial translations of the *Cratylus* from Greek.<sup>250</sup> Weighed against Peirce's statements in 1894 that he had no particular interest in Plato and that he never read Plato in Greek, this is significant. So far as I have been able to discover, Peirce began only three such translations of Plato's dialogues,<sup>251</sup> the third being a partial translation of the *Apology*. Only one of these translations of the *Cratylus* is noted in the Robin catalogue,

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<sup>249</sup> I will return to develop this principle and Peirce's reaction to it in the following chapter.

<sup>250</sup> Transcriptions of these translations are in an appendix.

<sup>251</sup> Though he did occasionally translate a few words or lines from one of the dialogues.

but the other is not, perhaps because it is hidden in one of Peirce's notebooks on dictionaries. This translation (*MS 1161*) is also accompanied by a long notation on the etymology and meaning of the Greek word *phuo*, related to *phusis*, usually translated "nature," and plainly related to the phrase spoken by Hermogenes at the beginning of the dialogue: "Cratylus here says, O Socrates, that a name's correctness belongs to each object by nature (*phusei pephukuian*) and that not that [sic] is a name which any men having agreed to call so do so call, uttering as a part of their own speech (*phones*) but that there is a natural correctness of names, the same for Greeks and all foreigners."<sup>252</sup>

Another reference to the *Cratylus* is in chapter IV of Peirce's "Minute Logic" (*MS 434*, written *c.* 1902) where Peirce devotes several pages to commentary on the *Cratylus*. There Peirce says, among other things, that the *Cratylus* operates on many levels, and that its main concern is with metaphysics. This is bolstered by the fact that many of Peirce's marginal notes in his copy of Lutoslawski's *Origin and Growth of Plato's Logic* concern the *Cratylus*. It is probably from Lutoslawski that Peirce got much of his interest in the *Cratylus*. Lutoslawski argued that the *Cratylus* was one of the first four dialogues Plato wrote for his Academy for the purpose of instructing his students, and that the *Cratylus* contains part of the origin of the theory of Forms. Peirce implies in this lengthy passage in *MS 434* that Plato's metaphysics shares some concerns with Peirce's. In still another place Peirce identifies the *Cratylus* as a turning point in Plato's thought. He writes there that "this dialogue is far superior to any that precedes it, from a scientific point of view."<sup>253</sup>

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<sup>252</sup> *MS 986.1.*

<sup>253</sup> *MS 974.13.*

From this it seems fairly certain that the *Cratylus* held a place of some importance among Plato's dialogues, in Peirce's estimation, and that it was important for Peirce's own thought as well. In what follows I will examine these passages more closely in order to explain the significance of the *Cratylus* for the development of Peirce's thought.

### **The major themes and arguments of Plato's *Cratylus*.**

Let me now turn to the *Cratylus* in order to consider its major themes. The dialogue begins with a discussion between Cratylus and Hermogenes, which Socrates is invited, significantly, I think, to join midstream. I say this is significant because although having Socrates join conversations already in progress is a common trope of Plato's, in this context it is a reminder that in one way we all "enter the conversation" midstream. We do not invent language out of whole cloth. Rather, we receive it in an already usable form, and must then try to use and understand it. We try to adapt it to our needs but also find that language is as much a constraint as a tool for our thought. In his writings on scientific and philosophical inquiry, Peirce frequently reminds his readers that this is precisely the case in all our researches. All inquiry begins *in medias res*.<sup>254</sup>

Peirce, in one commentary on the dialogue, points out that all three of the interlocutors in the *Cratylus* have been assumed since antiquity to have been teachers of Plato. Cratylus is a direct disciple of Heraclitus, and Hermogenes is an Eleatic.<sup>255</sup>

Cratylus' position is that there is one and only one correct name for each thing, and that this name is in some sense divine or original. Just what Cratylus means by this is not altogether clear, since he acknowledges implicitly that the language that he is using in

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<sup>254</sup> I will return to this theme in the following chapter.

<sup>255</sup> Peirce does point out in one of his commentaries that he finds it difficult to connect the positions these two take on language to the metaphysical or ethical views of their putative schools.

the dialogue signifies adequately to the task of discussing language, yet Cratylus claims not to know whether the words he uses are the true names of things or not. He also acknowledges explicitly that there are words in other languages that also signify correctly.

Hermogenes argues for the extreme contrary. His is a version of Protagoras' *homo mensura* principle. "No one is able to persuade me that the correctness of names is determined by anything besides convention and agreement. I believe that any name you give a thing is its correct name. If you change its name and give it another, the new one is as correct as the old....No name belongs to a thing by nature, but only because of the rules and usage of those who establish the usage and call it by name."<sup>256</sup> There is no original or correct name "by nature," but each name signifies only by convention or mutual agreement among speakers of any given language.

Hermogenes and Cratylus ask Socrates to mediate between these two positions. He responds, somewhat surprisingly, by directing the conversation to a lengthy series of etymologies. In them, Socrates corrects Hermogenes' position by first adopting it and then showing that what follows from it is that the rule-setters who gave us names must have known the real names of the things they named, because someone can only be a rule-setter who knows the real nature of a thing. Next he argues that even if there are no universal appeals in nomenclature there must nevertheless be at least some real continuity in nature for the conventional names to refer to. At this point he says very little about the nature of that continuity, but eventually Socrates brings Hermogenes to something like Cratylus' Heraclitean view, and then he begins to dismantle this view as well.

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<sup>256</sup> Plato, *Complete Works*. Cooper, John M. (ed). Indianapolis: Hackett, 1997. 103; 384d-e.



What he dismantles, chiefly, is the arrogance of claiming to know the whole truth about language, and the claim that we can have some sort of original or divine access to language. What he leaves intact in both cases is the idea that verbal signs may have origins, there may be continuity to language, and there may be a conventional element to language. Socrates does not seem to know how to reconcile these various views, or, if he does, he keeps it to himself. The only glimmer he gives us is when he says that it is through some sort of mantic or prophetic means that he has been able to perform the etymologies he has given.<sup>257</sup>

### **A brief account of Peirce on etymologies, definitions, and signification**

As I have just said, Socrates' method in the *Cratylus* is to use etymology to determine whether there be any continuity in language. That is, a major theme of the text is how names signify and what their historical development has to do with that. In particular, Socrates and the other two examine words that are taken to have special technical significance in philosophy and rhetoric. Since the *Cratylus* has as two of its major themes the science of etymology and the question of whether technical words signify by nature or convention, it will be helpful before proceeding further to review how Peirce thinks on these two points.

Peirce took a particular interest in rules for technical vocabulary. For instance, the manuscript where this longest commentary on the *Cratylus* appears, *MS 434*, begins with a discussion of rules for creating new technical terms in philosophy. In a number of

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<sup>257</sup> In this he is probably mocking the "oracular" *Cratylus* (this is what Hermogenes calls him at the outset of the dialogue.) He is also appealing to his meeting with Euthyphro earlier in the day, saying he must have some of Euthyphro's spirit rubbed off on him. This is plain mockery, since Euthyphro's spirit is impetuous, not mantic.

other places he drew up formal and detailed rules for developing new scientific and semiotic nomenclature.<sup>258</sup> It was apparently his hope that all technical neologisms would be useful and easily interpretable by those who would have to use them. The reasons why he hoped this are fairly obvious. If the terms are clear and easily identifiable, then the community aspect of the scientific work that relies on them will be able to proceed more smoothly. Complicated or arbitrary jargon represents a verbal roadblock when scientists wish to communicate with one another, and so is a violation of Peirce's highest rule: "do not block the path of inquiry."<sup>259</sup> Also, such rules, if they readily admitted neologisms, would permit scientific work to move forward without becoming burdened by whatever biases and meanings older terms might have accumulated. Peirce had considerable experience to draw on here, as he had done a good deal of work for two dictionaries, writing definitions for scientific and philosophical terms.

Peirce discusses his method of drawing definitions in a letter written in *The Nation*,<sup>260</sup> where he responds to Prof. Simon Newcomb's criticism of several of Peirce's definitions found in the *Century Dictionary*'s first volume. Peirce wrote that he wished to "illustrate my method of preparing definitions....The first step...is to find who originally introduced [the phrase] and where....I next inquire whether and where there has been any subsequent discussion of the meaning....Finally, I collect the common meaning of the phrase from a series of English writers of different periods." Newcomb found Peirce's definitions not up-to-date. Peirce replies that Newcomb's criticism ought

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<sup>258</sup> For instance, see his "Ethics of Terminology" at CP 2.219ff, also cf. CP 4.354, 5.414, 5.430, 5.502ff, 7.494, 7.603, 8.169, and 8.191.

<sup>259</sup> E.g. CP 1.135.

<sup>260</sup> N 1.504-5.

to have been limited to saying that Peirce forgot to explain that his definitions are historical and explain how the words have been used in order to tell their story.

So Peirce's method in etymology is *partly* like the one that Socrates uses in the *Cratylus*.<sup>261</sup> This method presumes an original rule-setter for words, and then attempts to find evidence for a given view of metaphysics in the putative meanings of ancient words. It should be remembered that he partly disavows this method by making it out to be the natural consequence of Hermogenes' and Cratylus' views, and partly by claiming it comes to him not by rational but by mantic means. It looks to the "rule-setter" or original user of the word (as far as the "original" user can be known) but it then assumes, as the later Plato does, that the continuous is eternal<sup>262</sup> (i.e. that forms have thirdness) and that the general rule or use of the words in history is part of their definition. Words grow out of their use in a community. That usage is a semiotic relation between objects and interpretants on several levels, and as a relation, it has regularity and generality. That is, words represent relations between people and things; among people who use them; and within the minds of those who use them. To put it another way, words are used to relate ideas to other people; they are used to clarify our relationships to things in the world; and we use them for thinking – relating ideas to ourselves, as it were.

When Peirce wrote these definitions, he found himself pulled in two directions. On the one hand, he wanted to permit as much latitude as possible for the formation of

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<sup>261</sup> One problem with Socrates' view, concerning which Plato may have been aware, is the fact that if ancient words are explained by appeal to other ancient words, this introduces problems like those surrounding the Forms in the *Parmenides*. Another problem is that it is not ancient words that Socrates uses to explain etymologies but usually contemporary words. Hermogenes and Cratylus seem wholly unaware of the circularity of this kind of etymology.

<sup>262</sup> See Peirce's comment on this in "Philosophy and the Conduct of Life" *EP II*, 37. He says there that Plato corrects the error of Heraclitus, who makes the continuous to be transitory, in which case thirdness remains perpetually only possible. Plato's (correct, according to Peirce) correction of this is to make thirdness central to his philosophy.

helpful new words, and for old words to grow in their meanings without having their origins anchor them fixedly to one and only one meaning. On the other hand, Peirce recognized that the history and origin of a word often carries with it a kind of logical force. This force is of two kinds. First, the originary meaning of a word indicates the kind of work that the word was intended to do. Words are verbal signs of objects, and over time they can come to be signs of objects other than the ones they first signified. That is, they can become more general. Identification of the original objects that the words signified effectively increases the community of inquiry to include those who first used the word by including their perspective. Second, knowledge of the history of a word often gives an indication of the circumstances and problems in logic that brought the word into usage. In the case of words that become technical philosophical jargon like ‘real’ and ‘idea,’ knowing the origin and history of the words is important in sorting out what force should be given to arguments that rest on those terms.

Knowing the history of words makes it obvious for Peirce that words do not signify either by nature alone or by convention alone. Of course, it is plain that there is some arbitrariness to words, indicating that words do not signify by nature alone. Peirce wrote to Victoria Welby that

the word ‘real,’—Latin *realis*—was not an old word. It had been invented during the controversy to mean that which is not a *figment*, as of course any word of a particular language is, or, to express the precise meaning of it in terms intelligible today, the Real is such that whatever is true of it is not true because some individual person’s thought or some individual group of persons’ thought

attributes its predicate to its subject, but is true, no matter what any person or group of persons may think *about* it.<sup>263</sup>

So “any word of a particular language” is a “figment,” i.e. is, taken merely phonemically, arbitrary. Cratylus’ position is thus rejected. Had the history of that language fallen out differently, any other collection of sounds could have signified that same object. On the other hand, that language *does* have a history, and its connections to other words really constrain it within its linguistic family. This is why, when Peirce was drawing up his rules for neologisms, he did not propose wholly new phonemes arbitrarily attached to significations. Rather, he looked back at earlier uses of words to see how they might be re-deployed in his time. For instance, speaking of the word that forms the root of “semeiotic,” Peirce wrote that

The dictionary is rich in words waiting to receive technical definitions as varieties of signs. The word *seme*, Greek semeion or sema, is probably not in the English Dict’y [sic]. But it is a good word, brief, general, and unmistakable—unless one were to mistake it for Italian. *Ma se le mie parole esser den seme*<sup>264</sup> that will only make them better *semeia*.<sup>265</sup> “Token” is our good old Gothic word, though generally something material, or at least individual, while a “type,” on the contrary,--literally,=French *coup*,--is of the nature of a form, an impression. The

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<sup>263</sup> *PW* 116.

<sup>264</sup> This might be a typographical error on Peirce’s part. The phrase translates as “But if my words are *den* seed....” The word “den” does not make sense here and is not, as near as I can tell, Italian. He may mean to use the word meaning “of.” Since he has used what appears to be a misspelled infinitive (“esser,” or “essere”) it might be indicative that his Italian wasn’t so good.

<sup>265</sup> *I.e.* Peirce thinks of new words as being like seeds. The words, like the ideas they represent, can grow.

idea seems to prevail that the Greek word is often used by Plato in the sense of a sculptor's model. I have my doubts whether Greek sculptors of that age used models as ours do. I think the canon and their memory guided them mainly. At any rate, Plato rarely if ever used the word in any such sense. There is a place in the *Republic* filling 42 pages of the Teubner (C. F. Hartmann) edition (vol. IV pp 58-99) in which Plato uses the word no less than 17 times, in every possible sense. Among these are perhaps two or three instances where it means something to be imitated, though not certainly. They are not the instances cited by L & S [Liddell & Scott's *Greek-English Lexicon*]. But if you look through his works for places in which he would be expected to use the word in that sense, it is very strikingly absent. I infer, therefore, that to his sense of the word, it was somewhat of a stretch so to use it. It usually means a character with the idea of being quite roughly like something, or the rough impression that experience of a thing leaves upon the mind.<sup>266</sup>

Once a language has begun, (if we may speak of languages having beginnings) it develops a set of habits of usage that limit and direct its growth. These constraints are not empty conventions, however, and etymologies cannot therefore be taken as the whole account of words. If we do so, we risk taking the etymology as the story of the beginning of a wholly conventional sign with no real connection to what is signified.<sup>267</sup> Similarly, if we insist that words cannot grow beyond their originary meaning, then we tenaciously

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<sup>266</sup> *PW* 194.

<sup>267</sup> I.e. if our etymologies focus on roots of words, not their histories. While many of our contemporary etymological dictionaries only give the oldest known roots of words, the *Oxford English Dictionary's* etymologies are of the Peircean kind, giving linguistic roots, first usages, and a brief history of use. The *OED* project was begun around the time Peirce died.

resist the connection between the word and the community that uses it. Both of these forms of nominalism effectively and quickly stifle further inquiry. In fact, words are caught in a web of associations with other words, with the community of those who use them, and with the real objects they signify, so that Peirce spoke of “the history of words, not their etymology, being the key to their meanings, especially for a word so saturated with the idea of progress as science is.”<sup>268</sup> Peirce was not adamantly opposed to defining words based on their etymologies, especially when doing so was a palliative to the anti-historicist view that words are wholly plastic and detached from the history of their growth. This was the case with Funk’s *Standard Dictionary*, which Peirce reviewed in *The Nation* in 1894.

In arranging the various meanings of a word, for the purpose of definition, Dr. Funk adopts the plan of putting the most ordinary everyday meaning first. At first blush, this looks like good sense in the case of a one-volume dictionary, which can make no pretension to serving the turn of those who wish to study the language *scientifically*, or even that of those who wish to learn its niceties of expression. Besides, he who is considering what words really do mean becomes so tired of lexicographers' attempts to guess the meaning from the derivation--attempts due to their study of English literature not being sufficient to inform them how that primeval meaning may have become modified in centuries of growth of associations--that he is disposed to welcome a rupture with etymology. But when he comes to see what Dr. Funk's rule leads to, he begins to think that,

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<sup>268</sup> *PW* 79.

after all, there is some merit in definitions based on the very early history of words.<sup>269</sup>

Let me draw a couple of observations from Peirce's comments on etymology and scientific terminology. One can begin to see that philological study is connected with metaphysics for Peirce. First, words grow in meaning over time. Their function as signs is a function in time, and therefore not dependent on their being sustained by a living, particular, human mind. Second, as signs, their associations with real objects and real interpretants enmesh them in the world of being and thereby give those who use them a certain *limited* access to metaphysics.

So Peirce has at least two reasons for drawing up rules for coming up with a useful and properly scientific terminology and for paying attention to etymology in doing so. First, an understanding of the origins of words can help us to understand the growth of knowledge. Etymologies become an example of what Peirce called the "Law of Mind," i.e. that ideas grow and spread continuously, becoming more general as they grow. Second, understanding the stories of words can help us to find the right words to use for scientific terminology. This is important: there is *in some sense* a right word to use for each object that needs to be named. I hasten to add that I am using the phrase "right word" not in a normative sense but more in the sense of the French *le mot juste*, i.e. a fitting word. Peirce does not suggest, as Cratylus does, that there is only one correct name for any object, but that the development of languages in their historical, scientific, and cultural contexts, will make certain phonemic combinations better than others, and

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<sup>269</sup> N 2, 43 – Peirce's review of Funk's Standard Dictionary, 8 March 1894



that attention to language and its history will help those forming technical neologisms to discover which phonemes are most suitable for use as technical names. This right name is found in the story of a given language. Peirce observed (in the opening footnote of *MS* 434) that English is particularly suitable for adoption as a scientific language because, of all the languages of Europe, it retained in its vernacular the largest number of words that were devised in the Middle Ages as technical vocabulary. Such words should be retained, Peirce argued, because they have a definite meaning acquired over time and tested by a scientific community. They are strengthened by their popular use, not weakened, because this popular use makes them more readily accessible and more richly connected to experience.

### **Peirce's commentaries on the *Cratylus***

I remarked above that Socrates' etymological method in the *Cratylus* is sometimes oracular or mantic. This is precisely the "mystical" element that the younger Peirce condemned as unscientific in Plato. Peirce does comment that both Plato's logic and his metaphysics were immature at the time of writing the *Cratylus*, but he also says that it is a "more scientific dialogue, by far, than those that precede it" chronologically.

This is no contradiction, but illustrates the shift in Peirce's understanding of Plato's thought. What he had earlier taken as mysticism Peirce now takes as an abductive inference. Socrates does not insist that his etymologies are the true ones, but each of them is plainly an hypothesis offered in explanation of perceived data.

While Peirce does hint at Plato's anticipation of Pragmaticism and abduction elsewhere in his writings, in his translations and commentaries on the *Cratylus* he focuses his attention chiefly on Plato's metaphysics.

### **a) MSS 986 and 1161**

The shorter of the two translations of the *Cratylus*, MS 1161, appears to be an early translation, made during the time that Peirce was working on dictionary entries. I say this because of its context, though its context may be misleading. It appears to be in a notebook containing other dictionary entries. Peirce worked on dictionary entries over about twenty years, first for the *Century Dictionary* and then for Baldwin's *Dictionary of Philosophy and Psychology*. I think it is right to put this translation after 1894 based on Peirce's (partly true) comment that he did not read Plato in Greek before then.

In 1161 Peirce focuses on the Greek verb *phuo* and its related noun *phusis*. In fact, this translation only makes it as far as the second speech of Hermogenes, wherein Hermogenes gives an account of Cratylus' view of language. Cratylus' view, says Hermogenes, is this: *Kratulos phesin hode, o Sokrates, onomatos orthoteta einai hekaton onton phusei pepukuian*. That is, "Cratylus says this, Socrates, that a name's correctness belongs by nature to each of the existents." Peirce then gives a three-page analysis of Plato's use of this word *phuo*.<sup>270</sup> In a nutshell, Peirce says that the root of this word signifies growth, so that the related Latin verb *fui*, (the perfect of *esse*) means not "I was" but "I grew." If this is the case, he says, then it seems that "the idea of Cratylus is that everything grows a name, - fantastic, childish, and out-Platonizing Plato." By this

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<sup>270</sup> Much of what he writes is taken directly from the Liddell and Scott *Greek-English Lexicon*.

last remark I take him to mean that while the young Plato makes the forms into existent and unchangeable things, so Cratylus seems to want to make even names into existent and unchangeable products of natural things, as though existent things bore names like trees bore fruit: each bearing its own kind. This is Platonistic nominalism of the sort that Peirce criticized in Berkeley's philosophy.

I think Peirce's use of the phrase "to each of the existents" here in this first translation is important. In the later translation Peirce first translated this as "to each thing," which he then crossed out and replaced with "to each object." The Greek is the genitive plural noun "ontón," which might be translated simply as "of the beings" or "of the things that be." In other words, in the earlier translation in MS 1161, Peirce renders "beings" as "existents" or seconds. In his later translation Peirce first goes for the more generic "things" and then for "objects," which is for Peirce a technical semiotic term that might include not only brute existents but whatever might be an object of our experience, thus encompassing all reality, including firsts and thirds, and not just seconds.

Cratylus' nominalism has apparently become softened in Peirce's eyes. It seems that in this later translation Peirce no longer reads Cratylus as trying to make names grow out of existent things, but as recognizing that growth and semiosis go together.

In MS 1161, Peirce comments that Cratylus' view that things grow names is absurd, and he abuses Cratylus for his foolish idea. In MS 986, Peirce now turns his vitriol upon Hermogenes. Cratylus' position is silly, Peirce says, but Hermogenes is the real fool. Hermogenes' chief failing is his lack of reflection on what he is saying. He is easily led by the nose by both Cratylus and Socrates. Socrates leads Cratylus to say that he thinks that not only propositions but also all the component parts of propositions may

have truth, and that a proposition is true only if its words are also true, whatever that might mean. At the time of this translation in *MS 986*, Peirce took this to be an absurdity. It is a commonplace of logic that truth is not contained in words, but in propositions. However, at some later point, Peirce seems to have attributed this position to Plato, and to have shown some agreement with it. Peirce referred to the *Cratylus* when he wrote part of the article on “Truth and Falsity and Error” in Baldwin’s *Dictionary of Philosophy and Psychology*. He wrote there that “Plato in the *Cratylus* (385B) maintains that words have truth; and some of the scholastics admitted that an incomplex sign, such as a picture, may have truth.”<sup>271</sup> Peirce seems to suggest in this context that words may indeed have some truth to them.

## **b) *MS 434***

*MS 434* is a draft of one of the chapters (IV) Peirce wrote for his “Minute Logic.” The draft begins midstream, and pages are apparently missing at the beginning of the document. The first whole page we have has a few lines about conscience, and then Peirce launches into a footnote about conscience that takes up the next few pages. The ostensible purpose of this chapter is to discuss the logic of the good, and the pages that follow the footnote are a series of numbered observations about ancient conceptions of the good. The fifteenth of these, which I have already mentioned in chapter 2, begins like this:

As to Plato, unless we are content to treat the only complete collection of the works of any Greek philosopher that we possess as a mere repertory of gems of

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<sup>271</sup> *CP* 5.571. Footnote to this in the *CP* reads: “From the article “Truth and Falsity and Error,” *Dictionary of Philosophy and Psychology*, ed. J.M. Baldwin, pp. 718-20, vol. 2 (1901). Only the part of the article given here was written by Peirce.” It is worth noting that this place Peirce cites in Plato (385B) follows right after the section he translated twice. The *Cratylus* begins on Stephanus page 383.

thought, as most readers are content to do; but wish to view them as they are so superlatively worthy of being viewed as the record of the entire development of thought of a great thinker, then everything depends upon the chronology of the dialogues...It is necessary that an entirely new study of Plato's philosophy should be founded upon that view of the chronology. I will endeavor briefly to do this for the single point of what is ultimately good.<sup>272</sup>

His endeavor is not brief. The MS continues for roughly 230 pages after this, and consists of a commentary on all of the dialogues of Plato in what Peirce, following Lutoslawski, took to be their chronological order. It is in this context that Peirce's longest commentary on the *Cratylus* appears. I should note that although the ostensible purpose of these comments is to discover the development of Plato's concept of the good, Peirce does not confine himself to Plato's ethics. Just as Peirce said about Plato, so it is true of Peirce that his writing here is a palimpsest, operating at more levels than overtly indicated. His comments range across metaphysics, epistemology, ethics, and aesthetics.

Here are some of Peirce's observations: there is some connection between the language used to describe the good and being. It is not erroneous, Peirce says, to give the same name to an action and to the habit from which it arises. The good is understood in terms of ends aimed at and actions by which it is intended to be achieved. For the logician this means at least partly a minute attention to language and thought. Language grows but not entirely. Words are not wholly plastic, nor do they grow out of objects.

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<sup>272</sup> MS 434.33f.

They must be given, but when they are given, they do indeed take on a general character and grow.

## Conclusions

Let me draw three simple conclusions from Peirce's reading of the *Cratylus*. First, as Joseph Ransdell has argued, Peirce's interest in Plato and his Socrates has to do with the logic and method of inquiry: Peirce is interested in Plato inasmuch as Plato gives an example of how to go about correcting one's own inquiry. This is certainly the case in Peirce's reading of the *Cratylus*. Peirce is not advocating a dogmatic reception of some supposed position advanced by Plato in the dialogue—for instance the theory of the forms which is germinally present here—but he recognizes the importance of thinking about Plato contextually.

Second, what follows from this is that history matters. It matters in the stories of words, and it matters in terms of how a community learns. This is plain from Plato's use of his three teachers to teach his own students, and in Peirce's use of terminology that has a long story. Once again, it is worth remembering that our word "history" comes from the Greek word "historia" which means simply "research," or "inquiry." For Peirce, historical inquiries are not mere curiosities about the unimportant past. Quoting Thucydides, Peirce pointed out in "Philosophy and the Conduct of Life" that "history is philosophy teaching by examples."<sup>273</sup> Historical inquiry is essential to our self-understanding as situated not only within a broad present community but also within a longitudinal community that extends into the past and future as well. The fact that Peirce made this observation at least once in the context of talking about the conduct of life, it

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<sup>273</sup> *EP II*, 39.

would seem to follow that Peirce thought our historical inquiries were significant for our thinking about ethics. As Peirce said, “truly to paint the ground where we ourselves are standing is an impossible problem in historical perspective.”<sup>274</sup> Or again, “an American who has never been abroad fails to perceive the characteristics of Americans.”<sup>275</sup> One may “travel abroad” in history as well as in geography, and to do so is to begin to learn from a broader community of inquirers.

Third, this means that etymology matters as well. But Plato warns us that we must avoid both the errors of Hermogenes and of Cratylus, and Peirce adds that we must avoid the error of Plato’s Socrates. The errors are these: Hermogenes thinks that language is entirely divorced from metaphysics and from historical context other than the conventions of human communities. Cratylus claims that he thinks that the only true meanings of words are those given to us by the gods. (Though this is not the position that Peirce attributes to Cratylus in his commentaries.) Peirce argues that Plato’s errors at this point in the development of his thought are largely self-misunderstandings.<sup>276</sup> Plato’s philosophy is one that has thirdness (that is, continuity, generality, or relation) as its principal component, but his logic is one of duality or dichotomy and he tends to discount secondness (that is, actuality, reaction, or brute existence). This is a self-misunderstanding because the logic of relations requires triadic relations, not just dichotomies, and because thirdness implies the reality of secondness. In simpler terms, Plato’s analysis of language rests on the reality of the existent world, but attempts to ignore or discount that world in order to focus its attention on the reality of ideas.

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<sup>274</sup> *CP* 4.32.

<sup>275</sup> “The Three Normative Sciences,” *EP II*, 196.

<sup>276</sup> *Cf.* “Philosophy and the Conduct of Life,” *EP II*, 38.

It is my guess that in the academy today we are more in danger of the first of these errors, of ignoring metaphysics in our discussions of language. I suspect that we have good reasons for this, chief among them being a heightened sensitivity to the dangers of the Cratylean error and its theologization of language. Cratylus is disingenuous, claiming that language is valid only if we have the right names and know we have them; but he is nevertheless willing to use names without knowing their stories and he takes his ironic conversation with Socrates without seeming to notice the inconsistency of his opinion. What Peirce would remind us of is this: there is real continuity in language that must be attended to, and radical breaks from historical language should be carefully calculated and not done wantonly. Our language is somehow determined by the world.<sup>277</sup> Peirce's study of etymology provides a helpful reminder that our conclusions about language and about metaphysics alike ought not to close off inquiry. Our research must recognize that if there is thoroughgoing evolution in the cosmos, then the origins of the cosmos must always remain at least partly opaque to us, and therefore we must pronounce judgments with the humility befitting those who only partially know. I think this may be part of why Peirce is so often willing to retain religious language and to speak of religious topics. The other part of this is his awareness that names do grow. Their meanings spread generally over time. Peirce thought that the *Cratylus* was written early in Plato's teaching career and that his position therein is one

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<sup>277</sup> This is something of a contentious issue in contemporary discussions of Peirce's semiotics. At times he seems to say that the world is nothing but signs, but much of the time he speaks of the real world being behind the signs, and of there being many things that are not signs. For instance, it is not plain what he means by the "dynamical object" that lies behind the immediate object, and it is not plain that the relationship between these two objects is semiotic. See Peirce's letters to Lady Welby in *The Essential Peirce II*, for instance. (I notice as well that in these letters he refers to the sign as the representation of a "Form," and I cannot help but wonder if this is not at least partly a reference to his study of Plato over the preceding eight years.) Broadly, Peirce seems to say that language is constrained by a real world, and language arises out of indices (*i.e.* signs that function indexically, by pointing to real things) and metaphors, both of which depend on the real existence of the world.



he later departed from. Peirce's interest is in watching Plato outgrow his position while still retaining what he learned from his earlier teachers.

To take another example, the text containing Peirce's longest commentary on the *Cratylus* (MS 434) begins with a long footnote about the word "conscience." This footnote traces the meaning of the word as it is used in philosophy, ethics, and religion, in order to identify its meaning in the context of the history of its usage.

How Peirce deals with this word is instructive. He reaches back to an old word, *sunesis*, used by Plato and Aristotle and the New Testament, to define a new term, a specific and technical use of the word "conscience," which he calls the "synetic"<sup>278</sup> conscience. Peirce identifies this "synetic conscience" with our "faculty of direct appreciation" or "our own heart," and by which he seems to mean a kind of pre-moral and instinctive abduction of moral beauty. This is interesting in a number of ways that I can only begin to mention as I bring this chapter to a close. Most of this essay is devoted to giving a chronological account of the development of Plato's notion of the good; it begins with a long note on terminology; it offers a neologism that is an attempt to give a technical name to an old idea by using a common modern word and an uncommon ancient one; and, in telling the story of this word, Peirce remarks on Plato's derivation of it, an unspoken nod to Plato's failed but important attempt to give a scientific account of language in the *Cratylus*.

I began this chapter with a quotation from Peirce that says that Plato's dialogues are palimpsests. Plato does not abandon his teachers when he finds he has overtaken them in his own thought. They leave an indelible mark on his thought, and cannot be wholly

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<sup>278</sup> There is no such word recognized by the current edition of the *OED*, so it is apparently a word of Peirce's own invention.

erased. So Plato acknowledges them and puts them to new use. Just as Peirce is not able to divorce himself from the Platonistic strain in his intellectual environment, so Plato is not fully able to escape the influence of his teachers. In a real way, Heraclitus is present in the conversation in the *Cratylus*, just as Plato remains present in contemporary thought.

Peirce finds Plato in agreement with him: language is neither wholly predetermined nor wholly plastic. The signs we use and make have histories. We are not free to pretend they have no histories, nor any connection to “underlying nature” nor are we free to claim that their meanings are eternal verities like the traditional view of the Forms. The meaning of words lies in their whole story. And part of that story—the present—remains at least partly opaque to us. We see from where we stand.

## Chapter 5: Dialogue and Reality: Peirce on Plato's *Theâetetus*

The *Theâetetus* and the *Parmenides* are in my estimation the greatest of Plato's productions.<sup>279</sup>

-- C. S. Peirce, c.1898.

*Socrates*: And do you mean by conceiving, the same which I mean?

*Theâetetus*: What is that?

*Socrates*: I mean the conversation which the soul holds with herself in considering of anything. I speak of what I hardly understand; but the soul when thinking appears to me to be just talking—asking questions of herself and answering them, affirming and denying. And when she has arrived at a decision, either gradually or by a sudden impulse, and has at least agreed, and does not doubt, this is called her opinion. I say, then, that to form an opinion is to speak, and opinion is a word spoken,--I mean to oneself and in silence, not aloud or to another; What think you?<sup>280</sup>

-- Plato, *Theâetetus*, 189E.

Thought, says Plato, is a silent speech of the soul with itself. If this be admitted immense consequences follow; quite unrecognized, I believe, hitherto.... every *thought* is a *sign*....To approach now more nearly to the question of reality....In short *thought* and *being* appear to be in their widest sense synonymous terms, and not merely metaphysically the same as the German idealists suppose.<sup>281</sup>

-- C. S. Peirce, 1868, in "Questions Concerning Reality."

This is, I think, Plato's greatest contribution to thought.<sup>282</sup>

-- C. S. Peirce, c. 1898, commenting on *Theâetetus* 189E.

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<sup>279</sup> Peirce's *marginalium* in his copy of Lutoslawski's *OGPL*, p. 415. Copy available at Peirce archives at Indiana University Purdue University Indianapolis, original at Harvard University library.

<sup>280</sup> Plato, *Dialogues of Plato*, B. Jowett, trans. London: Oxford University Press, 1871, p 252. (Stephanus 189e4-190a6.) This is the translation and edition Peirce used.

<sup>281</sup> *W*, 2.172-5.

<sup>282</sup> Peirce's *marginalium*, concerning Socrates' words at *Theaetetus* 189E, in *OGPL*, p. 376.

## Introduction

The previous chapter on the *Cratylus* foreshadows this chapter. In his study of Plato's semiotics, Peirce saw that metaphysics lies at the background of it all. Just as semiotics is evolutionary and realistic, so is thought, and so is metaphysics. The *Theâetetus* relates thought to metaphysics just as the *Cratylus* relates semiosis to metaphysics. For Peirce, all of the sciences are related, because all have to do with inquiry into the same reality. All the sciences, therefore, are evolutionary, and "all the sciences are slowly but surely converging."<sup>283</sup> This is why Peirce so often says that we should engage in our inquiries with "scientific singleness of heart."<sup>284</sup> Whatever we are studying, our discoveries will be related to the discoveries of other inquirers.

The *Cratylus* was among Plato's earlier works; the *Theâetetus* appears to have been one of his latest. Peirce found the *Theâetetus* to be one of Plato's greatest works. In this chapter I examine why this is so. Peirce looked to the *Theâetetus* for his earliest formulation of the pragmatic maxim, and later found in it much of pragmatism in germinal form: a version of the Protagorean *homo mensura* ("man is the measure [of all things]") principle that avoided equally the pitfalls of stark relativism and of the earlier theory of the Forms; the notion that all thought is in dialogue and therefore in signs; the belief that matter is effete mind; the suggestion that all science begins in the irritation of wonder; the importance of abductive inference for science; and a self-correcting theory of

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<sup>283</sup> *EP II*, 39, and *Cf.* 7.52.

<sup>284</sup> *Cf.* *CP* 7.51 and "The Neglected Argument for the Reality of God," where Peirce uses this phrase several times.

inquiry. As Peirce was beginning consciously to identify these principles, he was working on his own categories and especially the category of firstness. In the late dialogues of Plato, Peirce discovered that Plato's rejection of the theory of Forms had led him to begin unconsciously to formulate a three-level realist metaphysics.

It is in this last point where the title of the dissertation comes into play to pull together the whole of the dissertation: "The Slow Percolation of Forms." In his maturest philosophy, Plato's forms were changed from eternal existences to real firsts and thirds, whose effects percolate through all of being. When this is acknowledged, science ceases to be the attempt to accumulate all information (as though truth stood still waiting to be picked up) and becomes the attempt to know the cosmos as it is in its growth and evolution. The late forms were thus adopted as a model by Peirce. In them Peirce saw a model of Plato's self-correction, and also a formulation of the problem of categories and a hint at its solution. One way of formulating the problem is to ask how to reconcile the reality of laws of nature that motivate scientific research with the evolutionary spontaneity that makes the research possible. Another way to formulate this problem is to ask how there can be both pure and constant forms of reason and evolutionary spontaneity. Peirce thought Plato's late thinking about the forms provided a beginning place for solving this problem by making the forms themselves evolutionary.

Peirce's reading of the *Theaetetus* is a classic example of synechism, where the ideas he read in his youth in the dialogue grew from seeds into pragmatism. Peirce's metaphysics parallels the growth of Plato's metaphysics: in both cases, we move towards an evolutionary and synechistic view. The forms begin as eternal, existent verities, but become real ideas that are capable of growth. The forms spread generally throughout the

community. In other words, Peirce's view of history and of historiography, his view of language, his view of metaphysics, and his view of thought are all related, and all find their roots in Plato.

### **Plato's Late Dialogues**

In his 1898 Cambridge Conference lecture, "Philosophy and the Conduct of Life," Peirce spoke of "the dialogue of the *Sophistes*, lately shown to belong to Plato's last period."<sup>285</sup> He was, of course, referring to Lutoslawski's and his own stylometric dating of the dialogues. This dating plainly identified Plato's *Parmenides*, *Sophist*, and *Theaetetus* as some of Plato's last dialogues. This arrangement of the dialogues confirmed the usefulness of stylometric dating of the dialogues by offering a clear means of understanding Plato's thought in its development. For instance, in the *Parmenides* and the *Sophist* Plato gives reasons for abandoning the Forms as stable existences.<sup>286</sup> If the Forms are taken as eternal, unchanging verities, we are confronted with the difficult questions of explaining how the Forms are related to the world of appearances and to each other, and of explaining how these ultimately inaccessible existences are in any way cognizable by human intellect. Any attempt to organize the dialogues on the basis of internal chronology would be frustrated by these arguments against the forms that come from dialogues that feature both a young Socrates and an adult Socrates, since the dialogues that seem most to argue for Forms also feature an adult Socrates. If in his youth Socrates heard Parmenides offer devastating critiques of the Forms, and if Socrates in his

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<sup>285</sup> *EP II*, 35.

<sup>286</sup> *Cf. EP II*, 35.

adulthood then acted as though the Forms really existed without offering a reply to Parmenides, Socrates must appear as a poor thinker, and Plato must appear as a poet, not a philosopher. If, however, the age of Socrates in each dialogue is immaterial for dating the composition of the dialogues, then this difficulty is greatly diminished. Citing Aristotle's comments that Plato abandoned the forms late in life and substituted them for numbers,<sup>287</sup> Peirce argued that the late dialogues offer a different picture of Plato's metaphysics, one that resembled Peirce's own even though Plato did not seem to recognize it.

I mentioned in the last chapter that for Peirce semiotics gives at least a limited access to metaphysics. It is in his reading of the *Theâetetus* that Peirce offers a glimpse at how he understands this to be so. Briefly, if metaphysics is paralleled by semiotics, then the same sort of spontaneity that we saw in etymology should be present in reality. The *Theâetetus* claims that all thought is in dialogue and Peirce adds that all dialogue is in signs. In the *Theâetetus* Socrates pursues Protagoras' claim that human thought is the measure of all things, and concludes that this is only partly true. As I argued in the previous chapter, the signs by which we think cannot be wholly of our own making, or else there can be no conversation. The signs bear some connection to reality. However, too strong a formulation of this connection between language and reality cannot be sustained. The signs are partly of our making, after all. That there must be some connection between thought and reality is a necessary hypothesis from which scientific investigation receives its license, but if that connection is construed too strongly, the effect on science will be to remove at least some of its license by determining in advance

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<sup>287</sup> Peirce does not indicate where he has read this in Aristotle, but he probably has in mind *Metaphysics* 987b 20-30 and *De Anima* 404b 19-26: "the numbers are by him expressly identified with the Forms themselves or principles" (404b 23-24).

what results science may render. As we saw in the *Cratylus*, Plato's Socrates seems to suggest indirectly that our sign-representations are always imperfect. This is partly because we are always in danger of using signs to stop thought rather than to further our knowledge, a point Socrates makes explicitly in the *Theaetetus*.<sup>288</sup> Thought begins in wonder, and when wonder ceases, knowledge does not grow. Our access to knowledge of the real world depends on our attention to it, and our inquiry in turn depends on our ability to represent in clear signs what we observe. Socrates, in the *Theaetetus*, offers the pragmatic argument that we must posit some objective reality or else we cannot converse. Peirce stated Socrates' position like this: "If the individual man is the measure of things, there can be no false opinion. Now not only *some* man but *all* men agree that everybody (except themselves) do entertain false opinions in great profusion & therefore it must be so & the doctrine falls to the ground."<sup>289</sup> If this is an accurate representation of Plato's position, then Plato's conception of science is remarkably like Peirce's own in its insistence on inquiry being constrained by reality and on the importance it places on the consensus of the community of inquiry. Peirce's reading of the *Theaetetus* has several consequences for our understanding of Plato. Contrary to the received view that Plato was only concerned with ethics, the late Plato was in fact concerned with science, and his ethics bears directly on scientific study. For Peirce, science is always a communal pursuit, not a solitary one.<sup>290</sup> It is not the case that the individual is the measure of truth,

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<sup>288</sup> Cf. *Theaetetus*, 157B.

<sup>289</sup> *L* 463.3

<sup>290</sup> Cf. *CP* 4.9 (c. 1905), "I have formed the opinion that the proper sphere of any science in a given stage of development of science is the study of such questions as *one social group of men* can properly devote their lives to answering." (Italics mine.) And *CP* 7.55: "By a specific science will be meant a group of connected inquiries of sufficient scope and affinity fitly to occupy a number of independent inquirers for life, but not capable of being broken up into smaller coexclusive groups of this description. For since we are to consider science in general as a mode of life, it is proper to take as the unit science the scientific mode of life fit for an individual person. But science being essentially a mode of life that seeks coöperation,



but it may well be that the general consensus of all researchers is the measure, or at least the best measure we can hope for. But even this calls for caution. The community of inquiry cannot be mistaken as *creating* reality, nor should it be mistaken as devising a *final* picture of reality when it draws its conclusions. If real being does not lie behind all our investigations, then science is an illusion.

### Peirce's Reading of the *Theâetetus*

As important as the *Cratylus*, *Apology*, *Sophist*, and *Parmenides* were for Peirce, probably the most significant of Plato's dialogues for Peirce was the *Theâetetus*. One of Peirce's earliest extant manuscripts is his "Metaphysical Axioms and Syllogisms."<sup>291</sup> In this manuscript, Peirce attempted to systematize Plato's thought by extracting axioms and syllogisms from eight of the dialogues, including the *Theâetetus*. Ken Ketner has commented that

One of these axioms, number 25, supposedly from the *Theâetetus*, sounds strangely like the *pragmatic maxim*, which in Peirce's work first saw the full light of day, if I am right, in 1865. Axiom 25 from Peirce's 1860 notes on Plato reads: 'we only know our faculties by the conceptions or feelings they give us—by their results.' This means that it is possible that Plato was an inspiration for Peirce's pragmatic maxim.<sup>292</sup>

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the unit science must, apparently, be fit to be pursued by a number of inquirers." Also cf. his comments on science as the task of a group not of an individual in MS 1334, (also c. 1905).

<sup>291</sup> MS 988, dated May 30, 1860

<sup>292</sup> Kenneth Laine Ketner, "Peirce and Plato," unpublished paper, p.3.

Of all Plato's dialogues, the *Theâetetus* more than any other seems to have interested Peirce throughout his whole life. In 1868, in his "Questions Concerning Reality," Peirce seems to have been referring to the *Theâetetus* 189E when he wrote , "Thought, says Plato, is a silent speech of the soul with itself. If this be admitted immense consequences follow; quite unrecognized, I believe, hitherto."<sup>293</sup> Among the consequences are his claims that all thought is in signs and that thought and being are synonymous terms. Sometime after 1897 Peirce wrote in the margin of his copy of Lutoslawski's *Origin and Growth of Plato's Logic* that this observation concerning thought as speech was "Plato's greatest contribution to thought." From this follows the idea that private thought has an heuristic capacity, as Emerson and Thoreau had proposed. This theme of thought as conversation is repeated throughout his writings. Peirce does not always sharply distinguish between conversation with oneself, conversation with fellow researchers, and conversation with nature. All are forms of research, and all are necessary to science. "Successful research—say Faraday's—is conversation with nature; the macrocosmic reason, and the equally occult microcosmic law, must act together or alternately, till the mind is in tune with nature."<sup>294</sup> In question five of his 1868 "Questions Concerning Reality," Peirce wrote,

All thinking is dialogic in form. Your self of one instant appeals to your deeper self for his assent. Consequently, all thinking is conducted in signs that are mainly of the same general structure as words; those which are not so, being of the nature of those signs of which we have need now and then in our converse with one another to eke out the defects of words, or symbols. These non-symbolic thought-

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<sup>293</sup> *W* 2.172.

<sup>294</sup> *MS* 878.2.

signs are of two classes: first, pictures or diagrams or other images (I call them Icons) such as have to be used to explain the significations of words; and secondly, signs more or less analogous to symptoms (I call them Indices) of which the collateral observations, by which we know what a man is talking about, are examples. The Icons chiefly illustrate the significations of predicate-thoughts, the Indices the denotations of subject-thoughts. The substance of thoughts consists of these three species of ingredients.<sup>295</sup>

As I mentioned in chapter three, Peirce's "Neglected Argument for the Reality of God" bears a strong resemblance to Thoreau's "Walking." Thoreau extolled the importance of allowing oneself to be exposed to the novel and the unfamiliar in order to open up an heuristic conversation in one's own mind. In Peirce's 1908 "Neglected Argument" he echoed this theme of wonder leading to discovery in an inner dialogue. He wrote that the reality of God might be discovered in contemplating

some wonder in one of the Universes or some connection between two of the three, with speculation concerning its cause. It is this last kind—I will call it "Musement" on the whole—that I particularly recommend, because it will in time flower into the N.A....If one who had determined to make trial of Musement as a favorite recreation were to ask me for advice, I should reply as follows:....It begins passively enough with drinking in the impression of some nook in one of the three Universes. But impression soon passes into attentive observation,

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<sup>295</sup> CP 6.338, (c. 1909).

observation into musing, musing into a lively give-and-take of communion between self and self.<sup>296</sup>

This passage is replete with parallels to the *Theâetetus*, from Socrates' claim that philosophy begins in wonder to his insistence that thought and discovery occur in dialogue. Peirce acknowledges in his "Additament" to the "Neglected Argument" that Pragmaticism was practically the method of Socrates.<sup>297</sup> Arguably, even Peirce's three-category metaphysics is anticipated in the late Plato, although Peirce thought that Plato was not fully aware of his own movement in this direction.

Peirce returned to the *Theâetetus* throughout his life, often making striking discoveries in it. In 1905 he wrote to Lady Victoria Welby that he was too fatigued for any other work, so he spent the day reading the Greek text of the *Theâetetus*. He wrote,

A Hot spell having reduced me to a state of imbecility & incapacity for any exertion, I spent yesterday in reading the Theâetetus; and whether it was that utter relaxation of my entire psyche, it made an impression of novelty upon me such that I almost doubt whether I ever read it before in the original.<sup>298</sup>

His discovery on that day was that what he had previously taken to be Socratic induction would be better termed "abduction," and that Socrates' method really begins with abductive reasoning. It would seem that much of Peirce's philosophy is anticipated in the *Theâetetus*, and was developed by Peirce in conjunction with his reading of the dialogue.

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<sup>296</sup> *EP II*, 436.

<sup>297</sup> *CP* 6.490.

<sup>298</sup> *L* 463.1, dated 1905 July 16.

## The Themes of the *Theaetetus*

As in the case of the *Cratylus*, this is not very surprising, since the *Theaetetus* is *prima facie* concerned with one of the themes that occupied Peirce throughout much of his career, namely, a study of the possibility and conditions of scientific knowledge and its relationship to both the external world and internal representations of it in thought.

The *Theaetetus* is a treasure-trove of Platonic “gems of thought,” in which a handful of Plato’s better-known “gems” are found. Among these are Socrates’ remark—later echoed by Aristotle in the *Metaphysics*—that “philosophy begins in wonder,”<sup>299</sup> Socrates’ well-known description of his art as intellectual midwifery, and Socrates’ aforementioned description of thought as dialogue. The *Theaetetus* also is famous for its treatment and supposed refutation of Protagoras’ *homo mensura* principle.

In order to introduce and consider the importance of this principle, let me briefly review the story and themes of the dialogue. The bulk of the dialogue is an inquiry into the nature of knowledge, in the form of a discussion between Socrates and the boy Theaetetus, a student of Theodorus. The dialogue does not begin there, however. Rather, the dialogue begins with another dialogue, one held at a considerable remove from this dialogue between Socrates and Theaetetus. This initial dialogue is a brief discussion between the mathematicians Euclides and Terpsion. Terpsion has just seen the man Theaetetus being carried in from the field of battle, suffering from mortal wounds. This prompts Euclides to recall a conversation he had with Socrates, years earlier and shortly before Socrates’ death, in which Socrates recounted an earlier conversation with the boy

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<sup>299</sup> Plato, *Theaetetus*, 155D. Cf. Aristotle, *Metaphysics*, 982b10.

Theaetetus. After returning home, Euclides wrote down brief notes about that conversation. Later, at leisure, he reconstructed the whole conversation. Now, at Terpsion's prompting, Euclides tells his servant to read the dialogue aloud to them in honor of Theaetetus' renown.

In the remainder of the dialogue, Socrates examines Theaetetus on the topic of knowledge. Theaetetus immediately offers a definition of knowledge from Protagoras: knowledge is perception. Protagoras had allegedly advanced the thesis that human beings are the measure of all knowledge, since all our knowledge comes to us by perception. This is known as his *homo mensura* ("man is the measure") principle.<sup>300</sup> Socrates quickly shows Theaetetus that this principle cannot be the case if there is to be any difference between true knowledge and false opinion. If each individual is the measure of knowledge, then there will be no objective reference by which to determine which of two contraries is correct. Both will, then, be equally correct.

The conversation attempts at first to find a stable definition of knowledge, but this is unsuccessful. What emerges from the conversation is the view that if there is knowledge, it will be known by a general look or form, and our knowledge of knowledge, as it were, will be represented in signs that are more or less appropriate. That is, knowledge will consist in true opinions, represented in speech. But this is clearly problematic, since the only way to know that the opinions are true knowledge is to determine that they do in fact correspond to the things known. In turn, this can only be done if it is plain that the speech by which we represent relations is known to be accurate.

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<sup>300</sup> Diogenes Laertius and other ancient authorities say that Protagoras wrote a book entitled *Truth*, the first line of which was "Man is the measure of all things, of things that are that they are, and of things that are not that they are not." Diogenes continues, "He used to say that soul (psyche) was nothing apart from the senses, as we learn from Plato in the *Theaetetus*, and that everything is true." *Lives of Eminent Philosophers*. R.D. Hicks, trans. Cambridge: Harvard University Press, 1979. 2.463-5.

Unless the speech-signs through which things are represented to our thought have some firm relation to being, the whole dialogue has, in typical Socratic fashion, returned to its own beginning without achieving a satisfying definition.

Let me offer several observations about this that will help explain how Peirce read the dialogue. The conversation ends without a clear definition, but rather with a humble fallibilism. Echoing his words in the *Apology*, Socrates tells Theâetetus that he should never claim to know what he does not know, and should be willing to countenance unfamiliar opinions, since they might turn out to be true.<sup>301</sup> The fact that no fixed definition emerges is perhaps not as problematic as it might have seemed at first, since Socrates has already stated that words that are too stable will fail to represent nature. Such words are an attempt to arrest thought, to wrest it from the irritation of doubt and to deliver it over to rest from inquiry. But nature, and therefore, knowledge of nature, are subject to growth, so words must also be flexible enough to permit thought and inquiry to move as nature does. Philosophy begins in wonder, and when wonder ceases, philosophy ceases as well.

It is important to note that Socrates does not prove to Theâetetus that there is such a thing as knowledge, but he appeals to his sense that there is a distinction between truth and falsehood. Without such a distinction, there can be no conversation. So the whole of their pursuit of a definition of knowledge is predicated on their hope that science is possible.

We should also notice that the whole of this dialogue is reported at various removes. It does not purport to be a completely accurate account of a conversation

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<sup>301</sup> *Theaetetus*, 210C

between Socrates and Theaetetus. That is, the validity of what results from the conversation has not so much to do with accurate historiography or verbatim transcription as with an appeal to the reader to verify on her own that the logical investigation is conducted with fairness. Xenophon, in his Socratic dialogues, gives the impression that his intention is to record with accuracy the words spoken by his teacher Socrates. Plato frames this dialogue in such a way that there can be no pretense of it being a precise transcription: it is the tale (read by the slave boy, not by its author) of a tale (written by Euclides from his outline notes, after some time had elapsed) of a tale (told by Socrates) of a conversation held long ago. In a sense, the study of knowledge is removed from the realm of the private conversation and thrown out to the broader community.

There is one element of the original conversation that is reported by Euclides as an accurate recollection of his conversation with Socrates. This is not part of the dialogue, but is Euclides' recollection before the slave-boy reads the dialogue. Euclides says that Socrates spoke "prophetically" when he said that if Theaetetus grew to adulthood he would become a man of renown.<sup>302</sup> Here we have another example of "mysticism" attributed to Socrates. It should be noted, of course, that his "mystical" or "prophetic" nature is not absolutely predictive, nor is it of wholly private significance. It is hypothetical: Socrates supposed that *if* Theaetetus matured, *then* he would amount to something.<sup>303</sup>

Two exclusions need to be added here. First, once the main dialogue begins, the body is no longer present. Euclides' reduction of the dialogue to just verbal exchanges

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<sup>302</sup> *Theaetetus*, 142D.

<sup>303</sup> We do know that in one way Theaetetus went on to a kind of greatness by becoming a mathematician. Perhaps by calling Socrates prophetic and Theaetetus great, Plato is giving a nod to the importance of mathematics for metaphysical inquiries.



eliminates the presence of the physical bodies of the interlocutors.<sup>304</sup> Second, if Aristotle is correct, Euclides and Terpsion, both of the school of the Megarians, deny the reality of potentiality.<sup>305</sup> For them, only actuality is real, and then only what can be known of it existentially. This is important for two reasons. First, if the dialogue as they have reported it is inconclusive, this may say more about their prejudices than about Plato's doctrines. If that is the case, it may be that Plato's real aim in writing this is not to refute Protagoras so much as to show a difficulty in the denial of real potentiality. Second, whatever positive conclusions arise from the text may be the means by which this difficulty emerges. The Megarians may well contradict themselves in what they affirm. For instance, if Socrates truly is prophetic, this prophecy must be explainable under their system. But can a system that denies potentiality support a meaningful account of prophetic mysticism? If actuality alone is real, then only a brutally necessary mysticism can obtain.

Let me make one more point about the text and the relation between mathematics and metaphysics. The main dialogue occurs between Socrates and two mathematicians, who discuss the nature of knowledge and its relation to being. Throughout his writings Peirce repeats two points about this relation of mathematics to metaphysics. First, metaphysics properly waits on mathematics, and has been both its offspring and its "ape" since its earliest times. Peirce writes, "It is historical fact, I believe, that it was the mathematicians Thales, Pythagoras, and Plato who created metaphysics, and that metaphysics has always been the ape of mathematics."<sup>306</sup> Elsewhere, he writes

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<sup>304</sup> Seth Benardete makes a similar point in his commentary on Plato's *Theaetetus*, page I.86.

<sup>305</sup> Aristotle, *Metaphysics*. 9.3.

<sup>306</sup> *CP* 1.130 (c. 1893.)

“Metaphysical philosophy may almost be called the child of geometry.”<sup>307</sup> Second, whenever we attempt to make metaphysical thought precisely like mathematical thought, we go astray. Peirce writes,

One singular consequence of the notion which prevailed during the greater part of the history of philosophy, that metaphysical reasoning ought to be similar to that of mathematic, only more so, has been that sundry mathematicians have thought themselves, as mathematicians, qualified to discuss philosophy; and no worse metaphysics than theirs is to be found.<sup>308</sup>

What he has in mind is the trend of making metaphysics aim at certainty just as, for a long time, geometry aimed at presuppositionless certainty. This project was largely abandoned in the latter part of the 19<sup>th</sup> century. Peirce commented on this shift by saying that “the unconditional surrender, then, by the mathematicians of our time of the absolute exactitude of the axioms of geometry cannot prove an insignificant event for the history of philosophy.”<sup>309</sup> Elsewhere he wrote that

The mathematical axioms being discredited, are the metaphysical ones to remain unquestioned? I trow not. There is one proposition, now held to be very certain, though denied throughout antiquity, namely that every event is precisely determined by general laws, which evidently can never be rendered probable by observation, and which, if admitted, must stand as self-evident. This is a metaphysical postulate closely analogous to the postulates of geometry. Its fate is sealed. The geometrical axioms being exploded, this is for the future untenable.

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<sup>307</sup> *CP* 1.400 (c. 1890, “A Guess At The Riddle.”)

<sup>308</sup> *CP* 4.231 (c. 1902.)

<sup>309</sup> *CP* 1.400.

Whenever we attempt to verify a physical law, we find discrepancies between observation and theory, which we rightly set down to errors of observation. But now it appears we have no reason to deny that there are similar, though no doubt far smaller, discrepancies between the law and the real facts. As Lucretius says, the atoms swerve from the paths to which the laws of mechanics would confine them.<sup>310</sup>

The greatest contribution of mathematics to metaphysics has been in the failures of mathematics, not in its triumphs. The usefulness of certain branches of mathematics should not lead us to think that we can have knowledge of metaphysics just as certain as Euclid hoped to provide of geometry. Euclid's enterprise has been an approximation, not an infallible proof. If we recognize the failure of geometry, we can recognize the failure of trying to make the objects of metaphysics match the shape of geometry. Experience shows that there is an element of spontaneity at work in the world. The laws of nature are not stable existences but generalized behaviors, habits the cosmos has taken on, subject to at least minor variation. Peirce writes,

Gauss, the greatest of geometers, declares that "there is no reason to think that the sum of the three angles of a triangle is exactly equal to two right angles." It is true, experience shows that the deviation of that sum from that amount is so excessively small that language must be ingeniously used to express the degree of approximation: but experience never can show any truth to be exact, nor so much as give the least reason to think it to be so, unless it be supported by some other

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<sup>310</sup> CP 1.132.

considerations. We can only say that the sum of the three angles of any given triangle cannot be much greater or less than two right angles; but that exact value is only one among an infinite number of others each of which is as possible as that. So say the mathematicians with unanimity. The absolute exactitude of the geometrical axioms is exploded; and the corresponding belief in the metaphysical axioms, considering the dependence of metaphysics on geometry, must surely follow it to the tomb of extinct creeds. The first to go must be the proposition that every event in the universe is precisely determined by causes according to inviolable law. We have no reason to think that this is absolutely exact. Experience shows that it is so to a wonderful degree of approximation, and that is all. This degree of approximation will be a value for future scientific investigation to determine; but we have no more reason to think that the error of the ordinary statement is precisely zero, than any one of an infinity of values in that neighborhood. The odds are infinity to one that it is not zero; and we are bound to think of it as a quantity of which zero is only one possible value. Phoenix, in his Lectures on Astronomy, referring to Joshua's commanding the sun to stand still, said that he could not help suspecting that it might have wiggled a very little when Joshua was not looking directly at it. We know that when we try to verify any law of nature by experiment, we always find discrepancies between the observations and the theory. These we rightly refer to errors of observation; but why may there not be similar aberrations due to the imperfect obedience of the facts to law? Grant that this is conceivable and there can be nothing in experience to negative it. Strange to say, there are many people who will have a difficulty in conceiving

of an element of lawlessness in the universe, and who may perhaps be tempted to reckon the doctrine of the perfect rule of causality as one of the original instinctive beliefs, like that of space having three dimensions. Far from that, it is historically altogether a modern notion, a loose inference from the discoveries of science. Aristotle often lays it down that some things are determined by causes while others happen by chance. Lucretius, following Democritus, supposes his primordial atoms to deviate from their rectilinear trajectories just fortuitously, and without any reason at all. To the ancients, there was nothing strange in such notions; they were matters of course; the strange thing would have been to have said that there was no chance. So we are under no inward necessity of believing in perfect causality if we do not find any facts to bear it out.<sup>311</sup>

Peirce's claim is that if we cease trying to make metaphysics mimic an ideal and impossible mathematics, we will find that the absolute and unchanging laws of nature posited by mathematizing metaphysicians do not match our experience. Such attempts fail just as surely as Plato's early theory of forms fails. What does match our experience is a world in which both regularity and spontaneity are operative.

It is not evidently the case that Theætetus and Theodorus (or Socrates) are aware of all this, but the dialogue gives reasons to think that their treatment of Protagoras' *homo mensura* principle parallels what Peirce has to say about the relationship of mathematics to metaphysics.

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<sup>311</sup> CP 1.401.

## ***Homo Mensura: Protagorean Relativism and Pragmatism***

According to a common reading of Plato's *Theâetetus*, the dialogue refutes all forms of Protagorean relativism, of which pragmatism is one. For instance, one of the earliest commentaries we have on the dialogue, dating from sometime between 50BC and 150AD, makes this claim, followed by the suggestion that it is an aporetic dialogue intended to feed into the correct account of knowledge given at *Meno* 98A, where knowledge is true opinion that has been "tied down" by recollection.<sup>312</sup> More recently, Alexandre Koyré has spoken of "the long discussion [in the *Theâetetus*] wherein Socrates develops Protagorean relativism in all of its forms and aspects—individualism, social relativism, pragmatism." This relativism is implied in Protagoras' sensationalism,<sup>313</sup> and is ultimately self-refuting. So, therefore, must be pragmatism.<sup>314</sup>

However, at least two of the classical Pragmatists argue that the dialogue not only doesn't refute pragmatism but in fact endorses a version of pragmatism. Both F.C.S. Schiller and William James viewed the *Theâetetus* as a place from which to argue for pragmatism, and Schiller developed this position over several years, effectively arguing that in fact Plato in the *Theâetetus* was the originator of pragmatism. Schiller had explained, in a letter to James dated 2 November 1897, "that his doctrine was derived from Plato and a saying of the Ephesians<sup>315</sup> and not from Kant."<sup>316</sup> He similarly complained that while Peirce was the originator of the name of pragmatism, it is in fact a

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<sup>312</sup> Cf. *Encyclopedia of Classical Philosophy*, Donald Zeyl, ed. Westport: Greenwood Press, 1997. 543-4. (ECP gives this note: Text, Italian translation, and commentary by G. Bastianini and D. Sedley in *Corpus dei papiri filosofici greci i latini* pt. 3, Florence, 1995. Tarant, H. *Classical Quarterly* 33, 1983, 161-187.)

<sup>313</sup> Making it sound like Koyré wants Plato to be attacking not Protagoras but Locke. Of course, Locke's sensationalism was one of the targets of Emerson. As I showed in chapter 3, Peirce shares Emerson's objection to Locke's apparent reductionist materialism, and so to this degree Peirce and Koyré are in agreement.

<sup>314</sup> Alexandre Koyré, *Discovering Plato*. NY: Columbia UP, 1960, p. 38.

<sup>315</sup> Schiller is probably referring to the pluralism of Heraclitus of Ephesus.

<sup>316</sup> *The Correspondence of William James*, Vol. 8, 604 – James' register of letters received.

much older doctrine that derives from the ancients, not from the moderns—whence Schiller’s distancing himself from the Kantian sound of “pragmatism”:

I will admit [that Peirce] may have invented the name (wh. I don’t much like), but has he been the *effective* author of the idea? In a way Anaximander discovered Darwinism. A doctrine really dates from its first effective launching & so here, though of course there were plenty of ‘pragmatists’ before ‘Pragmatism’....

The editors of James’ letters add this footnote: “The following appears in [Schiller’s] “‘Useless’ Knowledge,” p. 203n: ‘Strictly speaking, I am reminded, it was Mr. C.S. Peirce [who gave expression to pragmatism], but one must not spring too many new philosophers at once on the ancients.’”<sup>317</sup> In Schiller’s letter to James, dated 4/2/03, he wrote:

The enemy, to judge by Hy. Jones in the Jan. Hibbert Journ. are in a very enfeebled condition, & it almost looks as tho’ Hegelism wd perish of senile dementia. Jones is Latta to the *n<sup>th</sup>* Ritchie can only ask querulously whether Protagoras was not refuted ages ago & say that he can understand no logic but Aristotle’s and Hegel’s! [sic]<sup>318</sup>

James replied to Schiller,

I’m particularly rejoiced that Plato is to occupy so central a position....The most effective way of turning the tables on our particular adversarys [sic] is to fling Plato’s Theatetus [sic] right into their teeth. They treat us now as little street boys and ignoramuses, of which I indeed am one, but they can treat you as such no

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<sup>317</sup> *Ibid.*, p. 482.

<sup>318</sup> *Ibid.*, Vol 10, p. 196.

longer if you emphasize and develop that particular criticism, which their lopsided training will lead them especially to respect.<sup>319</sup>

In November of 1907, Schiller did just that, delivering a lecture to the Oxford Philosophical Society, which he then expanded and published the following year under the title *Plato or Protagoras? Being a Critical Examination of the Protagoras Speech in the Theaetetus with Some Remarks Upon Error*.<sup>320</sup> According to Klaus Oehler's analysis of this speech,<sup>321</sup> Plato misunderstood but was not totally opposed to Protagoras. Though Protagoras is usually taken as the clever but mistaken proponent of relativism whom Plato defeats, it is rather the case that Plato does not fully understand Protagoras and is unable to refute him. The way the dialogue ends without a clear definition of knowledge and with an appeal to be willing to countenance unfamiliar opinions may be taken as a justification of this view. Oehler adds that those whose thought Plato truly despised he never mentioned at all, preferring to silence them by refusing to acknowledge them. Plato's several dialogues in which Protagoras appears show that Plato was only partly opposed to Protagoras' doctrines. Plato (or rather, Plato's Socrates) responds to Protagoras in the *Theaetetus* only with rebuke, and not with substantive argument. Schiller's exposition of this argues that Protagoras' *homo mensura* principle is not naked relativism but some proto-pragmatism, wherein humans may only judge according to experience and consequences, never absolutely. Schiller and Oehler speculate that Plato

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<sup>319</sup> *Ibid*, Vol. 11, p. 259.

<sup>320</sup> Oxford: B.H. Blackwell, 1908, 31 pp.

<sup>321</sup> Oehler, Klaus. "Protagoras from the Perspective of Modern Pragmatism." *Transactions of the Charles S. Peirce Society*. Winter- Spring, 2002; 38(1 2): 207-214.



was not opposed to Protagoras' humanism by the time he wrote the later dialogues *Theaetetus* and *Sophist*.

Koyré's opinion that the *Theaetetus* does refute relativism and therefore pragmatism, may well arise from his familiarity with James and Schiller, both of whom espouse a version of Protagoras' *homo mensura* principle in their pluralism. For Koyré, the *Theaetetus*' understanding of science is implicit—it is not in knowledge of sensibles but in

the possession of the truth. And truth is nothing other than the revelation of being. We have science when we are in truth, that is, when our soul, in immediate contact with reality, with being, reflects it and reveals it to itself. This being, this reality...is not the disorganized mass of sensible objects that the populace (and the sophist) call by that name. Being in the popular sense, mobile, unstable, and transitory, is not, or is barely, being: it is and it is not, at one and the same time, and that is why it cannot be the object of science, but at best the object of opinion. No, the being that we envisage is the stable, immutable being of essence that our soul has in its possession, a possession it now recalls to mind, or at least that it can so recall, which can thus be made present itself to the soul.<sup>322</sup>

Koyré's reading of the dialogue is typical of those who wish to posit a stable unity in Plato's thought, and his understanding of knowledge in the *Theaetetus* seems to depend on Plato's earlier dialogues, in which Socrates posits—experimentally, at least—the existence of such stable, immutable verities by which all knowledge should be

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<sup>322</sup> Koyré, *Discovering Plato*. New York: Columbia University Press, 1960. pp. 50-51.

measured. Protagoras and his *homo mensura* principle serve to show the only alternative to positing absolutes. Since the result is untenable—knowledge would be indistinguishable from falsehood—both the existence of absolutes and our soul’s contact with them are established as the only tenable position.

Peirce’s reading of the *Theaetetus* is slightly different. It does not begin by declaring what knowledge is and what it must be; rather it begins with a study of knowledge from Protagoras’ perspective: we see from where we stand. Throughout Peirce’s writings on inquiry, he repeats the theme that we do not begin our inquiries from an ideal and merely theoretical position but from an hypothesis that arises out of experience. This is especially evident in Peirce’s critiques of Cartesian philosophy, as in his “Some Consequences of Four Incapacities.” There he claims that humans have “no power of pure Introspection, . . . no power of Intuition, . . . no power of thinking without signs . . . [and] no conception of the absolutely incognizable.”<sup>323</sup> Just as we saw in the previous chapter, each of these four denials attempts to remind us that scientific inquiry begins already *in medias res*. Our thought is embodied thought, not pure, disembodied intuition or rational introspection that can discover within the mind such truths concerning being that avoided us in external experience, without reference to that experience. Inasmuch as thought is in signs, it is mediation that does not give direct access to that which the signs represent. Whatever stable, objective, or independent reality may lie so far behind signs as not to be itself either a sign or else representable in signs remains absolutely incognizable to us. As thinkers, we are already fully and

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<sup>323</sup> *EP I*, 30.

inescapably engaged in a semiotic universe. It is not so much the case that thought is in us as that we are in thought, and thought and being are synonymous.<sup>324</sup>

Like Socrates and Koyré, Peirce believes there must be some means of distinguishing truth from falsehood if science is to progress, but like Schiller and James, Peirce insists that there cannot be knowledge of that which absolutely cannot be an object of experience. Against Koyré, Peirce would argue that we never have absolute knowledge of being, only approximate knowledge at best. Against James, Peirce insisted that there can be no immediate knowledge of being. Such knowledge would amount to the kind of mysticism that shuts the mystic off from community and thus from the possibility of testing knowledge. We are the measure in some real sense, but obviously not the only or whole measure. Or rather, if we are the measure, we are a measure of things that are nevertheless real. Something like the stability of the forms is needed, but they must be accessible to reason. Science, if it is to progress, needs to re-think the forms.

### **Protagorean Science: Metaphysics and Logic**

Before talking about Peirce's metaphysics it is worth stating something that has already been lurking in the background of the earlier discussion of Protagoras. Peirce's philosophy is not primarily concerned with metaphysics, but first and foremost with logic. The same may be said of Plato as well, despite the fact that Plato has often been understood as chiefly a metaphysician. G.M.A. Grube, for instance, characterizes Platonism as essentially a belief in Platonic metaphysics, as defined by the forms or ideas. He adds,

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<sup>324</sup> Cf. *W* 2.175.

The theory of ‘ideas’ is the belief in eternal, unchanging, universal absolutes, independent of the world of phenomena; in for example, absolute beauty, absolute justice, absolute goodness, from which whatever all we call beautiful, just or good derives any reality it may have.<sup>325</sup>

This is not Peirce’s view of metaphysics, nor, arguably, is it Plato’s. As Ken Ketner has said,

In any case, it is true that...[a] major intersection with [Peirce and] Plato lies in Peirce’s conclusions about the nature of mathematics. This is well represented in [the Cambridge Conference Lectures of 1898], a canonical book-length summary by Peirce himself of his late system.<sup>326</sup>

Ketner adds, “According to Peirce, mathematics is the science that discovers necessary connections between hypotheses.”<sup>327</sup> A little later in the same place, Ketner adds that “Mathematical inquiry is not possible without mathematical dialogue.”<sup>328</sup> Mathematics, then, is to be understood broadly here to involve all three branches of logic: abductive or hypothetical, deductive, and inductive. Mathematics in this case is shorthand for those logical principles which must lie in the background of all scientific inquiry. Of course, mathematics is not the same as science or metaphysics, since it treats of possible or hypothetical worlds, not of actual existence. Scientific or metaphysical inquiries are mathematical inasmuch as they permit themselves to be constrained by logic.

Metaphysics follows upon what is discovered through our experience, including both our experience of the world and that experience of thought which informs us about the nature

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<sup>325</sup> Grube 1968, 1.

<sup>326</sup> Ketner, unpublished paper, 7.

<sup>327</sup> Ketner, unpublished paper, 9.

<sup>328</sup> Ketner, unpublished paper, 11-12.

of knowledge itself. In this sense thought and being are the same, as Peirce said in his 1868 “Questions Concerning Reality.” According to Peirce, both he and Plato understood this to be true, that metaphysics is a consequence of science, which is in turn a consequence of logic. Logic must underwrite science if science is to be more than a personal account of private experience in a language that no one else can understand. Metaphysics then emerges as an account of what follows from the communal attempt to articulate our investigations into experience. If this is so, then a strong conception of metaphysics cannot be the starting-point for investigations, lest it unduly constrain inquiry. As Joseph Ransdell has said,

Platonism is best understood as the attempt to discover the presuppositions of the practice of Socrates’ dialectical craft (the “forms” have whatever reality and ontological status that requires), to explore the possibilities of its development beyond the basic aporetic and hypothetico-deductive method which is its Socratic kernel, and to carry philosophy as a communicational practice forward into the era of increasing dependence on writing by representing it iconically in drama shaped by pedagogical ends. For Socrates and Plato, as for Peirce, philosophy is logic first and metaphysics only subsequently.<sup>329</sup>

Peirce’s categories of firstness, secondness and thirdness may appear to be categories of metaphysics—and they are—but they are first of all the categories of thought and of experience—that is, of logic and of phenomenology—and provide only a general framework within which to begin investigations into reality. Peirce’s idealism is

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<sup>329</sup> Ransdell, 344.

one that emerges as a consequence of the experience of thought itself. It is not, however, an idealism like the caricature-version of Protagorean relativism in which all of reality is a projection of the opinions of humans. Both strong constructions of the theory of forms and relativism that is strongly construed prioritize metaphysics. The former requires investigators to explain all things according to ideal existences that cannot ever be the objects of experience; the latter rejects out of hand the possibility of finding anything stable that might constrain thought.

It is in this light that we can make sense of Plato's treatment of Protagoras in the *Theaetetus*. The fact that Protagoras figures in so many of them—including the *Cratylus*, *Theaetetus*, and, of course, one dialogue named after Protagoras, among others—indicates that Plato saw something in Protagoras' thought that was worth considering. The caricature of Protagoras as an absolute relativist whose ideas are easily dismissed by reference to a stable reality might be too facile, Oehler suggests. The Protagorean claim that knowledge is identical to perception is easily dismissed when the boy Theaetetus brings it up. However, the dialogue does not conclude with a better account of knowledge, and may appear to be a failed inquiry, unless three facts are remembered: first, this is not the final account of knowledge given in Protagoras' name. Second, all the speakers in the dialogue operate on the assumption that they either do have knowledge or will at least be able to recognize it when they have finally isolated it. Third, the dialogue is, after all, a *dialogue*. That is, it is a representation of inquiry *in a conversing community* and *over a long period of time*.

Recall Peirce's definition of research as dialogue. "Successful research—say Faraday's—is conversation with nature; the macrocosmic reason, and the equally occult

microcosmic law, must act together or alternately, till the mind is in tune with nature.”

What underwrites this conversation is the belief that nature “follows general laws, in other words, has a reason.”<sup>330</sup> Add to this Peirce’s observation in his letter to Lady Welby that the Protagorean *homo mensura* principle fails if it is taken to mean that the *individual* is the measure. Peirce then follows this statement with the observation that what all people agree on, absolutely and universally, is our best measure of knowledge.

### **The Slow Percolation of Forms**

Over against the conception of laws of nature as absolute and unchanging existences, Peirce posited the evolution of the whole cosmos, including its laws of nature. Out of pure possibility actuality arises, and over time, generality emerges.<sup>331</sup> General laws, then, may well have arisen from a universe of pure possibility. If so, then both possibility and generality obtain in the cosmos, and science must take this into consideration. This is, of course, hypothetical, but it is an hypothesis that Peirce thought best fit the observed facts of regularity and of spontaneity. Peirce’s thinking about the Forms parallels his thinking about laws of nature. Over against the conception of forms as immutable existences, Peirce posited the forms as reals. I said at the end of chapter three that Peirce’s late study of Plato coincided with his attempt to work out his category

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<sup>330</sup> MS 878.2.

<sup>331</sup> This is an oversimplified story of Peirce’s categories, and I am not going into the detail of the development of this aspect of Peirce’s thought here. Joseph Esposito has already done so in his article, “The Development of Peirce’s Categories,” *Transactions of the Charles S. Peirce Society*. Winter, 1979; XV, 1:51-60. Peirce struggled with reconciling the categories as *ontological* and the categories as *relational*. On the one hand, as historical ontological categories, it was not plain how anything could arise out of anything but secondness (*i.e.* how can anything come out of nothing?); on the other hand, all the categories are known in their thirdness, *i.e.* in their relationship to one another. The long citation from CP 6.192-196, below, is from the later Peirce. As I mentioned earlier, Esposito suggests that Peirce never completely worked out this relationship, but that if he had, and if he had worked out his proof of Pragmaticism, “he would have had to embrace openly the evolutionary Platonism he had so long kept in the background.” (60).

of firstness, corresponding to spontaneity, novelty, and qualities of feeling. As reals, Plato's forms appear to be playing the role of both firsts and thirds, that is, of both possibilities or qualities and of generalities or laws of nature.

Kelly James Parker finds in Peirce a parallel to Plotinus. "Like Plotinus, Peirce sees the Platonic Forms as teeming and seething with life (*Enn.* VI 7 [43] 12), but for Peirce this implies that the Forms develop, evolve, and change. Peirce and Plotinus both reject the Platonic notion that the laws of nature are 'laid down in advance and then applied.'"<sup>332</sup> For Peirce, this is a corollary of synechism, and it is a position that is foreshadowed in his early writings, but not explicit until the late 1890s. Synechism, it will be remembered, is the doctrine of the continuity of ideas. Ideas spread generally, decreasing in force while increasing in generality, pervading a community. In or around 1898 Peirce described the whole cosmos as being like this, and arising out of pure potentiality, a universe of arbitrary qualities, which Peirce explicitly identified with Plato's Forms.

*From this point of view [of continuity] we must suppose that the existing universe, with all its arbitrary secondness, 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. If this be correct, we cannot suppose the process of derivation, a process which extends from before time and from before logic, we cannot suppose that it began elsewhere than in the utter vagueness of completely undetermined and dimensionless potentiality. The evolutionary process is,*

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<sup>332</sup> "The Ascent of Soul to Noûs: Charles S. Peirce as Neo-Platonist" in R. Baine Harris, ed. *Neo-Platonism and Contemporary Thought, Part One*. Albany, NY: SUNY Press, 2002; (165-182).



*therefore, not a mere evolution of the existing universe, but rather a process by which the very Platonic forms themselves have become or are becoming developed.* We shall naturally suppose, of course, that existence is a stage of evolution. This existence is presumably but a special existence. We need not suppose that every form needs for its evolution to emerge into this world, but only that it needs to enter into some theatre of reactions, of which this is one. 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.*<sup>333</sup>

Emerson had glimpses of this continuity allied to spontaneity, but his mysticism and distaste for systematic thought prevented his seeing it altogether. Emerson's insistence on the individual's right to think freely became like individualistic Protagorean relativism, in which no one can say to another that her conclusions are false. While Emerson posited an essential unity among the great philosophies of the world's history, he also spoke forcefully in favor of individual enlightenment. If this latter position is taken too strongly, conversation becomes impossible. For Emerson, what emerges from the soul's deepest places cannot be questioned. Peirce recognizes that this must be the case to some degree if there is to be conversation in community: something in each person's thought must correspond to something in the thought of everyone with whom

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<sup>333</sup> CP 6.192-6; all italics are mine.

she wishes to communicate. For Peirce, this is partly explained by synechism. Certain general rules of logic must obtain in thought everywhere. Emerson's Transcendentalism assumes this and denies it at the same time. In 1859 Peirce wrote, "There can be no need of a Transcendental Philosophy if right reason does not lead to contradictions of *a priori* principles. For the principle of the syllogism itself we must assume to be right in all cases since it is that which we use and the only thing we can use in refuting any use of reason."<sup>334</sup> Of course, this was written when Peirce was young, and he came to modify this position somewhat. Plainly, even human understanding of logic can grow. Peirce's study of Plato, Aristotle, and Philodemus demonstrated that for him, as did his own articulation of abduction. Does this mean that the principles of logic themselves grow? Is the syllogism not absolute? On the one hand, we must posit the syllogism as practically infallible, for two reasons. First, it is the deductive means by which we test the validity of logical propositions, and as such we have no deductive means of testing it. Second, it is universally agreed upon that it is valid. For Peirce, universal agreement is as close as we can come to certainty. On the other hand, if the whole cosmos of Forms evolves, it is likely that reason's forms evolve as well. We might attempt to insulate reason from evolution by assigning it to the underlying principles of the cosmos. If so, then we would be faced with a question human reason does not appear equipped to address: does God evolve? Peirce's best answer to this is that it is less false to affirm God's growth than to deny it. A reasonable understanding of a world before reason had any purchase is ultimately uncognizable, and all we can do is extrapolate, humbly, from what we can know through historical reasonings and human consensus. Peirce's phrase

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<sup>334</sup> MS 921.1, "That There Is No Need of Transcendentalism."

in the above passage, “before logic,” cannot be the identification of a positive time in history, but an hypothetical pre-historical, pre-cosmic time. By the late 1890s Peirce was willing to say that “among the things [that evolve] are time and logic.” The whole cosmos—not merely the reactive, existent world, but all the laws, generalities, and reason by which it behaves and may be understood—can be understood in terms of evolutionary forms.

Plainly, this notion of forms as evolutionary is quite different from both the received tradition of Platonism and from much of Peirce’s own early thinking about Platonism. In his review of Fraser’s edition of the works of Berkeley, Peirce complained of Berkeley’s nominalism in making the forms to be the only real existences,<sup>335</sup> a criticism he repeated in 1903 in his lecture, “Seven Systems of Metaphysics.”<sup>336</sup> He traced this back to Plato, as in his marginal note to axiom 7 in his 1860 manuscript, “Axioms and Syllogisms.” According to Plato, he said, “The Ideas of Pure Reason are Real Objects.” His comment on this is telling: “I should have worded this thus: Abstract qualities, or at least some of them, are real things.” Later he would have avoided using the word “things” here, but what is important is his use of the words “abstract qualities” and “real” and his omission of “objects,” making the Forms real firsts (before he had worked out that categorial system) without imputing existence to them.<sup>337</sup> This notion that the Forms were qualities of feeling evidently held some allure for Peirce. Ten years later, in his 1870 review of Henry James, Sr.’s *Secret of Swedenborg*, he described James’ view that the Forms were alive.

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<sup>335</sup> CP 8.8, 8.10, 8.30. Also Cf. CP 5.470.

<sup>336</sup> Illustrated at EP II, 180, and in more detail at cf. EP II, 165.

<sup>337</sup> MS 988.

The form is represented as the archetypal, creative idea [that] gives a thing all its qualities....The form is the essential element which belongs to the thing even in its mere potentiality...[but the form is also in man] the Divine element in him....that is, it is his conscience of good and evil. The form is the element of love in man...<sup>338</sup>

These elements in James, Sr., Emerson, and Plato entered his thinking in his youth and percolated slowly through the years until the late 1890s. Plato remained, like Emerson and Thoreau and Henry James, Sr., attractive but unscientific. The attractiveness lay in spontaneity and growthfulness, but the forms were always posited as distant and incognizable. With regard to “the question concerning the Platonic forms” Peirce put “Platonism aside as at least incapable of proof, and as a self-contradictory opinion if the archetypes are supposed to be strictly universal.”<sup>339</sup>

This changed when, in the 1890s, Peirce came to see that in his late dialogues Plato himself did not view the Forms as strictly universal nor as existences, but as somehow continuous. In his lecture, “Philosophy and the Conduct of Life,” Peirce said

Now in minor particulars I am hostile to Plato....But in regard to the general conception of what the ultimate purpose and importance of science consists in, no philosopher who ever lived, ever brought that out more clearly than this early scientific philosopher. Aristotle justly finds fault with Plato in many respects. But all his criticisms leave unscathed Plato’s definitive philosophy, which results from the correction of that error of Heraclitus which consisted in holding the

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<sup>338</sup> Charles S. Peirce, review of Henry James, Sr.’s *The Secret of Swedenborg*, in *The North American Review*, (Boston: Fields, Osgood, & co. 1870) vol. CX, p. 336.

<sup>339</sup> CP 8.18.

Continuous to be Transitory and also from making the Being of the Idea potential....Although Plato's whole philosophy is a philosophy of Thirdness—that is to say, it is a philosophy which attributes everything to an action which rightly analyzed has Thirdness for its capital and chief constituent—he himself only recognizes duality, and makes himself an apostle of Dichotomy—which is a misunderstanding of himself.<sup>340</sup>

Peirce wrote this just as he was discovering the late Plato's self-correction. Among the “minor particulars” that Peirce objected to were, as I have noted in earlier chapters, Plato's moralism and his insistence that the aim of life was to make the acquaintance of pure ideas.<sup>341</sup> But taken together, Peirce saw these two errors as counterbalancing. Peirce commented on this in his definition of “Matter and Form” written for Baldwin's *Dictionary of Philosophy and Psychology*.<sup>342</sup>

If the philosophical conception of matter distinguished the metaphysics of Aristotle that of Plato had been no less marked by its extraordinary development of the notion of form, to which the mixed morality and questioning spirit of Socrates had naturally led up; the morality, because the form is the complex of characters that a thing ought to have; the questioning, because it drew attention to the difference between those elements of truth which experience brutally forces upon us, and those of which reason persuades us, which latter make up the form.<sup>343</sup>

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<sup>340</sup> *EP II*, 38.

<sup>341</sup> *EP II*, 38.

<sup>342</sup> *Dictionary of Philosophy and Psychology*, The Macmillan Co., New York, vol. 2, pp. 50-55 (1902).

<sup>343</sup> *CP* 6.355

As is plain from “Philosophy and the Conduct of Life,” in his maturest philosophy, Plato saw the forms as both continuous and as potential. Plato misunderstood his own philosophy when he tried to make spontaneity and generality the same thing, but his late dialogues show Plato beginning, unconsciously perhaps, to correct this error. The first step was conceiving the Forms as evolutionary, as in the *Cratylus*. The next step was the rejection of the concept of the Forms as fixities in the *Parmenides*. The final step was his incipient recognition of continuity in the late dialogues.

What Peirce said about Plato’s self-misunderstanding he might have said about Emerson, or Henry James, Sr.:

This self-misunderstanding, this failure to recognize his own conceptions, marks Plato throughout. It is a characteristic of the man that he sees much deeper into the nature of things than he does into the nature of his own philosophy, and it is a trait to which we cannot altogether refuse our esteem.<sup>344</sup>

Peirce concluded the lecture by saying that

The soul’s deepest parts can only be reached through its surface. In this way, the eternal forms, that mathematics and philosophy and the other sciences make us acquainted with, will by slow percolation gradually reach the very core of one’s being; and will come to influence our lives; and this they will do not because they

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<sup>344</sup> *EP II*, 38.

involve truths of merely vital importance, but because they are ideal and eternal verities.<sup>345</sup>

The last two words make it appear that Peirce was still thinking according to the traditional conception of the forms as stable existences, but in this lecture he called them eternal verities for two reasons: first, because he was still beginning his reading of Plato, and had not yet worked out his final version of the forms. Second, he wanted to distinguish these truths from the merely passing things of “vital importance.” Philosophy should not be beholden to practical ends. Inquiry’s ends must not be determined wholly in advance. This concluding passage is about conforming our reason to the world, conforming our very instincts to the world, which cannot be done by attention to “merely vital” matters. The forms are those generalities and qualities of nature that science and mathematics strive after. A few paragraphs before this passage Peirce called the Forms “eternal verities”<sup>346</sup> he talked about “one great cosmos of forms, a world of potential being,” connecting the forms to firstness (which is also done by his connecting them to the deepest part of reason, i.e. to instinct) and in the lecture he spoke several times of the eternal as continuous (a correction of the error of Heraclitus, which figured, of course, in the *Cratylus*) which connects the “eternal” verities to thirds. Their eternity has to do with their nature as thirds; the continuous is not itself transitory, but it is that which underlies growth and change in other things. Their verity has to do with their reality. Every quality that meets us in the world, and every generality that obtains, is a Form.

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<sup>345</sup> *EP II*, 41.

<sup>346</sup> *Cf. EP II*, 3, “Immortality in the Light of Synechism.”

What is the upshot of all this? For the late Peirce, the whole cosmos is shot through with forms, and Plato's conception of the end of philosophy as an attempt to make the acquaintance of these forms is the best conception of philosophy and of science. We individuals do not measure the world, in the end, but the great community of inquirers, over time, in conversation with one another and with the cosmos come to take its measure as it evolves and grows. If thought and being are not strictly synonymous, then at least they approach one another in the ideal community of inquiry.

Thought is a dialogue, and every dialogue is in signs. The signs we use come to us through experience of the world, through the qualities of things and through relations between things. Peirce understood the Forms in the late Plato to be roughly equivalent to Peirce's logical and phenomenological categories of firstness and thirdness, that is, of qualities and relations. So the signs we use come to us through our contact with Forms. We do not hold the Forms as our unique and total possession, nor do we invent them, nor do we ever discover them completely, at least not on our own and in our age. But the whole cosmos is permeated with them. Plato discovered this but did not realize it. Peirce began to articulate Plato's thought for him.

In short, if we are going to regard the universe as a result of evolution at all, we must think that not merely the existing universe, that locus in the cosmos to which our reactions are limited, but the whole Platonic world, which in itself is equally real, is evolutionary in its origin, too.<sup>347</sup>

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<sup>347</sup> CP 6.200.



If the whole universe is evolutionary, then this offers a way to think about the surprising events that spark scientific inquiry, and the prodigious events that evoke religious awe. In the final chapter I will show how Peirce's study of Plato helped him to think about the relationship between laws of nature, scientific inquiry, historiography, and miracles.

## Chapter 6: Consequences of Platonism: Miracles and History

### Introduction

I have so far sketched out the story of Peirce's encounter with Platonism and his commentaries on some of Plato's texts. In this chapter I now turn to consider one of the significant consequences of Peirce's study of Plato. Peirce's philosophy of miracles is relevant here because in it all the themes of Peirce's logic of history, his attempted 'onement' of religion and science, his late cosmology, his ethics of scientific inquiry, his evolutionism, and his study of Plato come together.

Robert Ayers wrote the first of several articles on Peirce's view of miracles that have begun to appear in the last several decades. In his article, Ayers says that what Peirce has to say on the subject is "interesting and...tantalizingly brief,"<sup>348</sup> but this is only halfway true. That what Peirce has to say about miracles is interesting is understatement. That what he says is tantalizingly brief is a misunderstanding of the context in which those writings appear. While it is true that what Peirce says explicitly about miracles is often quite brief, it is usually nested in a larger context that pertains implicitly to an understanding of the miraculous, and so his writings on miracles might be understood to be considerably greater than the few snippets most often cited. Ayers seems only to have had access to the *Collected Papers* and other published writings; but Peirce's published writings are often only the tip of the iceberg, buoyed up by a mass of unpublished related manuscripts that not only show the development of Peirce's thought, but also serve to connect his thinking in one field with his researches in another.

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<sup>348</sup> Ayers, Robert H. "C. S. Peirce on Miracles." *Transactions of the Charles S. Peirce Society*. Summer, 1980; 16: 242-254.

One example of this is in his 1901 piece, “On the Logic of Drawing History From Ancient Documents, Especially from Testimonies.”<sup>349</sup> The opening lines indicate that the subtext of this rather long essay is miracles, and that what follows will be a sustained response to Hume’s “On Miracles” chapter in the *Enquiry Concerning Human Understanding*. It is mostly, however, an *indirect* response to Hume. One curious aspect of this essay is how little it mentions Hume and miracles and how much attention it gives to a discussion of Plato.

Plato, Hume, miracles and “laws of nature” each receive considerable attention from Peirce in the period 1897-1903. The “Logic of History” is of particular interest to me for two reasons: first, because we have several drafts of the paper in addition to similar work in the “minute logic,” an abstract Peirce delivered to the National Academy of Sciences in 1901 and his subsequent report on that conference,<sup>350</sup> so its context is quite rich. Second, the “Logic of History” brings all these themes together in one place. But this juxtaposition of themes prompts the question I wish to take up here, namely: what has Peirce’s interest in Plato got to do with Hume and, more importantly, with miracles?

One simple answer that may be given to the question of why Peirce chooses to talk about Plato rather than, say, the miracles of the New Testament, is that any discussion of the latter is liable to generate more heat than light. There exist several manuscripts that are either drafts of the “Logic of History” or closely related chapters for his “Minute Logic,” each bearing telling titles. One reads, “The Proper Treatment of Hypotheses: A Preliminary Chapter, Toward an Examination of Hume’s Argument

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<sup>349</sup> Hereafter, “The Logic of History.”

<sup>350</sup> Indicating that here we have Peirce’s edited views, which he considered well-formed enough to publish.

Against Miracles, in its Logic and in its History.”<sup>351</sup> An earlier version of this title was “On the Principles which ought to Guide us in Accepting or Rejecting Historical Testimony.” In the latter of these, Peirce writes “We here find ourselves plumped into a corner of the fray which has long been raging all over the field over historical criticism between instinct and systematic logic.”<sup>352</sup> To jump into this fight over practical matters of religion is to enter a battlefield where no speech can be heard over the din of the shouting combatants. A discussion of the history of Plato, or of Pythagoras, would perhaps not excite such violent passions, and might allow for a hearing for his ideas. But I think there is more to Plato’s presence here than that. Another reason why Peirce doesn’t discuss particular miracles is because in order to be able to do so we would need first to have a proper understanding of the logic of history, i.e. of the proper treatment of hypotheses concerning testimonies about prodigious events. In order to talk about miracle-testimony we need first to understand the logic of abduction; metaphysics and logic are thus intimately connected. Peirce finds a version of Plato’s metaphysics helpful in thinking about miracles. To explain, let me say a few words about some unpublished *MSS* that illustrate Peirce’s growing interest in Plato in this period.

### **Peirce’s turn to Plato**

Peirce’s reaction to Lutoslawski’s work, which I discussed in chapter three, was mixed. He admired Lutoslawski’s attempt to perform a scientific analysis that depended upon mathematics and upon empirical data. But while Peirce admired the method, he

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<sup>351</sup> *MS* 692. I note simply that he does *not* refer to miracles directly in the title of the “Logic of History,” but mentions them immediately in the opening paragraph.

<sup>352</sup> For instance, in Peirce’s time, this debate over historical criticism had recently come to a head with regard to the question of the historicity and reliability of Biblical documents. Peirce’s concern here anticipates the “de-mythologizing” movement in Biblical criticism in the 20<sup>th</sup> century.

lamented Lutoslawski's prejudicial handling of the data. In his 1903 Harvard lecture on "Seven Systems of Metaphysics," Peirce describes Lutoslawski as a metaphysician of mere secondness, that is, one who "would like to explain everything by means of mechanical force."<sup>353</sup> His contempt for this prejudice, which he calls "strict individualism, the doctrine of Lutoslawski and his unpronounceable master"<sup>354</sup> is hard to miss.

For Peirce this strict individualism of Lutoslawski is a toxin that has poisoned the whole well of Lutoslawski's historical, literary and logical researches. Peirce's critique of Lutoslawski is like his repeated critique of Zeller in the 1892 Lowell Lectures: both men are blind to their mechanistic prejudices, largely because those prejudices are shared by many of their nominalistic contemporaries. Historians who reduce all history to a mere account of brute facts must of necessity be telling only the story that suits their presuppositions. History must take into account the development of real ideas, but Lutoslawski and Zeller fail to notice the abductions they themselves perform and the realism those abductions imply.

In the "Logic of History," Peirce points out that by their prejudices, Lutoslawski, Zeller and the like "are thus provided with two defenses against historical testimony. If

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<sup>353</sup> *EP II*, 164, 180

<sup>354</sup> *EP II*, 180. The footnote to this sentence in *EP II* identifies the "unpronounceable master" as Adam Mickiewicz, (mits-key-EH-vitch) the Polish National poet, and author of "Pan Tadeusz." In a late essay entitled "Polish Personalism" (*The Personalist*, 1952. 33:15-21), Lutoslawski explains with patriotic enthusiasm that Mickiewicz's lectures at the Collège de France in 1840-1845 made individualist personalism the national philosophy of Poland. It is characterized by an opposition to idealism; and by the sole certainty of one's own pre-corporeal and persistent existence. Lutoslawski describes a transformative experience he had some 66 years before, when, as a youth of 22 in the year 1885, he read Diotima's speech in Plato's *Symposium*. "As soon as I had read the above passage I suddenly became aware with absolute certainty that Diotima and Socrates were wrong [in claiming the reality of Ideas], for absolute beauty is a mere notion of the mind and it is only the individual mind that is a true being, not its ideas or notions. Plato's error confirmed my certainty that I am the only true being I know." (*op. cit.* p. 16) He goes on to say that he held this prejudice for the remainder of his career.

the story appears to them in any degree unlikely, they reject it without scruple; while if there is no taint of improbability in it, it will fall under the heavier accusation of being too probable; and in this way, they preserve a noble freedom in manufacturing history to suit their respective impressions.”<sup>355</sup>

Peirce’s critique of Lutoslawski in the unpublished *MSS* and of Zeller in both the “Logic of History” and elsewhere<sup>356</sup> is nearly identical to the critique of Hume in the “Logic of History.”<sup>357</sup> This critique has been dealt with in some detail elsewhere,<sup>358</sup> so a rough summary will do here. Peirce remarks that “The whole of modern ‘higher criticism’ of ancient history in general, and of Biblical history in particular, is based upon the same logic that is used by Hume.”<sup>359</sup> Roughly, Hume misunderstands the nature of abduction, and attempts to use probabilistic methods, which are correctly applied only to seconds, to discuss firsts and thirds. The objection is not to the use of statistical probability in general, but to the attempt to use it to compare the likelihood of an event

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<sup>355</sup> *EP II:77*. It is difficult to tell from the *MSS*, but while most of the *MSS* appear to be from this engagement with Lutoslawski, the project of discovering the chronology of the dialogues may have occupied Peirce for some time prior to this. There are also correspondences between the themes of “The Logic of History” and the Lowell Lectures of 1891 and the “History of Science in One Volume” projected in 1898. According to *MS 1604*, dated September 1894, Peirce had not up to that year read Plato except in translation, so any work involving translation of Plato may safely be placed after 1894. Peirce was understandably disgusted with Lutoslawski’s and Zeller’s subjective historical reductionism. At the same time, he found one element of their thinking attractive: the Humean attempt to approach historiography scientifically and in terms of mathematics. He latches on to the method of stylometry and puts it to full use in trying to arrive at a chronology for the dialogues. The secondness of the fact of the written words of the dialogues makes them susceptible to mathematization; whereas the ideas themselves are not seconds and therefore not quantifiable; this is the error of the historians of secondness.

<sup>356</sup> Notably, the Lowell Lectures of 1892, where Peirce addresses Zeller at some length in several of the lectures. These have been published *HP 2*, 139-296. See especially lectures I, II and VI (*MSS* 1275 and 1278).

<sup>357</sup> But whereas Lutoslawski and Zeller are minor figures and simple “corpuscularians,” Hume is both a more significant figure in the history of philosophy and more admirable to Peirce as a thinker.

<sup>358</sup> In addition to the articles on miracles mentioned in note 1, I refer the reader to William Pencak’s article on Peirce’s historiography, “Charles Sanders Peirce, Historian and Semiotician,” *Semiotica* 83-3/4 (1991), 311-332..

<sup>359</sup> From “The Laws of Nature and Hume’s Argument Against Miracles,” June 1, 1901. Cited in Philip P. Wiener, *Values in a Universe of Chance*, 1958: New York, pp 292-293.

against that of a character.<sup>360</sup> In simpler terms, while statistical probability can draw on past events to make predictions of future likelihoods, it cannot be used to “predict” whether some event happened in the past. We may reasonably say that a die has a one in six chance of coming up six each time we roll it, but we may not absolutely rule out testimony that someone rolled six a hundred times in a row.<sup>361</sup> We cannot simply use the historical events that appeal to us to completely rule out those that do not appeal to us. Lutoslawski makes the logical error of inferring, from the unlikelihood of certain events happening in the future, the utter impossibility of events *having happened* in the past. In his abstract of the “Logic of History,” Peirce writes that “the probabilities upon which the critics of history rely are not objective, but are mere expressions of their preconceived notions, than which no guide can be less trustworthy.”<sup>362</sup> Peirce agrees with Hume and his 19<sup>th</sup> century disciples in wanting to put prejudicial religious dogmatism in its place; but Peirce sees what they do not, namely that they are subject to another kind of dogmatism, namely their allegedly “scientific” prejudices.

As I have shown in the previous two chapters, Peirce then turns to Plato as an unwitting philosopher of thirdness to overcome this prejudice. While Peirce’s critique of Hume has received considerable attention, his turn to Plato, however, has not.<sup>363</sup>

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<sup>360</sup> And since characters are not brute events or reactions, they are not susceptible to methods of statistical analysis. Cf. CP 2.777: “An objective probability is the ratio of frequency of a specific to a generic event in the ordinary course of experience. Of a fact *per se* it is absurd to speak of objective probability. All that is attainable are subjective probabilities, or likelihoods, which express nothing but the conformity of a new suggestion to our prepossessions: and these are the source of most of the errors into which man falls, and of all the worst of them.”

<sup>361</sup> At CP 2.667 Peirce uses precisely this example of dice to talk about the impossibility of using statistical methods to rule out miracles.

<sup>362</sup> CP 7.162

<sup>363</sup> Two of the rare exceptions to this rule are Max Fisch’s very helpful article on “Peirce’s Aristotle: the Greek Influence in His Later Philosophy” in K. L. Ketner and C. J. W. Kloesel, eds., *Peirce, Semiotic and Pragmatism: Essays by Max H. Fisch* (Bloomington: Indiana University Press, 1986), pp 227-248; and Joseph Ransdell, *op. cit.*

This is, for Peirce, a new picture of Platonism. Earlier in the lecture, Peirce explains that he has recently come to understand something about Plato that Plato himself never seems to have fully recognized, namely that Plato is a philosopher of three, not two categories, and that he is a philosopher of continuity. Peirce's researches into the dating of the dialogues serve the purpose of placing the *Sophist* at the end of Plato's career, allowing the later theory of the forms as continuities (i.e. as thirds rather than as transcendent seconds) to be the fruit of a life of research. Against the prevailing notion of laws of nature as invariable and inviolable fixities Peirce contrasts this Platonic notion of real generalities that are synechistic. Such generals have inherently the possibility of growth, at least in terms of their getting represented in a variety of ways. Peirce writes elsewhere in "Philosophy and the Conduct of Life" that

The really continuous things, Space and Time, and Law, are eternal. The dialogue of the *Sophistes*, lately shown to belong to Plato's last period—when he had, Aristotle tells us, abandoned Ideas and put Numbers in place of them—this dialogue, I say, gives reasons for abandoning the Theory of Ideas which imply that Plato himself had come to see, if not that the Eternal Essences are continuous, at least, that there is an order of affinity among them, such as there is among Numbers. Thus, at last, the Platonic Ideas became Mathematical Essences, not possessed of Actual Existence but only of a Potential Being quite as Real, and his maturest philosophy became welded into mathematics. (*EP2:35.*)



Peirce does not give any indication of what it is he is reading in the *Sophist* that would indicate that Plato has changed his theory of the Ideas, but an investigation of Peirce's sources helps somewhat. When he wrote this piece, he had only just begun to read Plato closely and may not have read much of the *Sophist*. However, the phrase "lately shown" refers to Lutoslawski's (then) very recent work, and Peirce mentions Aristotle as well. Lutoslawski puts the *Sophist* late in Plato's career, after the *Parmenides*. The *Sophist* may then be seen as Plato's response to his own self-criticism in the *Parmenides*, where he argues, among other things, that if the Ideas are understood as having actual and unchanging existence, then some other set of Ideas is needed to explain their relationship to one another, and so on *ad infinitum*.<sup>364</sup> Lutoslawski then argues that, in the *Sophist*, Plato has turned away from his earlier concern with identifying the Ideas towards attempting to articulate a new method of science. In this new method, the being of the Ideas is taken to be somehow continuous. "The ideas...can evidently only be notions of the human mind, never the self-existent ideas of a space above heaven."<sup>365</sup> These Ideas, as "notions of the human mind," are subject to growth and change. While Peirce rejected Lutoslawski's nominalistic claim that the ideas then "exist in the soul," he affirmed the notion that they could grow. He also agreed with Lutoslawski that the Ideas could be related in some way as numbers are: not as existent objects but as ideal realities that may be related continuously.<sup>366</sup> As for Aristotle, Peirce is probably referring to Aristotle's comments in *Metaphysics* 987b 20-30, or possibly *De*

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<sup>364</sup> For a good summary of these self-criticisms see G.M.A. Grube's *Plato's Thought*, Indianapolis: Hackett, 1980, 32ff.

<sup>365</sup> Lutoslawski, 422.

<sup>366</sup> I am not a mathematician, and I cannot speak to exactly how Peirce saw these relations. For a more detailed discussion of this notion of continuity, form, and number, see Ketner and Putnam's introduction to *RLT*, Ketner, Kenneth Laine, ed. (Cambridge: Harvard UP, 1992) and my earlier notes about Peirce's reaction to Kant's notion of continuity.

*Anima* 404b 19-26. There Aristotle says “the numbers are by [Plato] expressly identified with the Forms themselves or principles.”

The evolution of Plato’s thought thus appears to correspond to the evolution of Peirce’s thought. The re-evaluation by Plato of his Theory of Forms closely parallels the re-evaluation of the notion of “natural law” that Peirce is calling for. Both the Forms and natural laws have been thought incorrectly either as mere names or as unchanging existences. Peirce connects Number with Law, and calls Law a continuity. Natural laws then, like the later Forms, are to be re-thought as continua with infinite possibility of getting represented in the world, and the job of science is not merely to presuppose laws, but to “begin to discern...one great cosmos of forms, a world of potential being,” one “for which the real world affords no parallel.”<sup>367</sup> Elsewhere he writes that “the evolutionary process is, therefore, not a mere evolution of the *existing universe*, but rather a process by which the very Platonic forms themselves have become or are becoming developed.”<sup>368</sup>

It should be noted that this discussion occurs in the context of the role of philosophy in the conduct of life. The logic of miracle-testimony and the metaphysics of the miraculous are bound together with the ethics of scientific (and theological) inquiry; the logic leads to an understanding of the metaphysics if it is conducted apart from the dictatorial whims of prejudice.

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<sup>367</sup> *EP II*, 40, “Philosophy and the Conduct of Life.”

<sup>368</sup> *CP* 6.194. Note that Peirce makes the Forms play the dual role of firsts and thirds: they are both ‘potential being’ and that which has ‘become developed’. Cf. *CP* 6.353 and 6.452, and the corresponding definitions in *Baldwin’s Dictionary of Philosophy and Psychology*, especially Vol 2:50-55 on “Matter and Form.”

## Plato and the overcoming of scientific prejudice

So Plato is of interest in the “Logic of History” paper for two reasons: 1) as a subject of history which will not excite the passions as would a discussion of New Testament miracles; 2) as a corrective to the prejudices of scientists, including scientists of history.<sup>369</sup>

The prejudices of scientists (and of historians) that Peirce identifies are three: 1) They hold that science should aim at utility, producing practical material or moral results; 2) that laws of nature are eternal fixities such that an inductive, probabilistic inquiry will approximate certain knowledge of them<sup>370</sup>; and 3), following from (2), that miracles are violations of the fixed laws of nature, the unlikelihood of which makes all miracle-testimony negligible. For the later Peirce, Plato answers each of these prejudices.

First, the notion that science should aim at utility. Peirce’s concern is that all science which is done for practical purposes will wind up being blinded by those purposes and so will fail to see what is really there to be seen. Plato, too, may be understood as holding this prejudice, inasmuch as he makes the purpose of all inquiry the improvement of the soul. But, as Peirce writes in “Philosophy and the Conduct of Life,” Plato counterbalances this error with “the opposite [error] of making the whole aim of human life to consist in making the acquaintance of pure ideas.” Now these pure ideas

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<sup>369</sup> In this context Peirce is particularly concerned with historians of thought like Lutoslawski and Edouard Zeller, but he also argues against nominalistic versions of the social and natural sciences. For a compact statement of Peirce’s mature objections to scientific nominalism, see his 1901 review of Karl Pearson’s *Grammar of Science*.

<sup>370</sup> It would seem that this contradicts the idea that laws of nature are purely human constructs, which many scientists, Peirce would say, *claim* to believe, but in fact this claim is only a lack of self-awareness, since all actually hold that laws of nature are real.

have traditionally been understood as Peircean seconds, as eternal fixities that exist in another realm and which are somehow instantiated in ours.<sup>371</sup>

This brings us to the second prejudice: that nature is governed by immutable laws. The project of empirical science has met with enough success in formulating rules whereby future reactions may be accurately predicted that the result has been scientific hubris in declaring these laws to be unchanging verities which we know with continually greater certainty. Science has, then, uncritically taken up a sort of nominalistic theory of the Forms.<sup>372</sup> As a remedy for this, Peirce then looks both to contemporary evolutionary theories and to the later Plato<sup>373</sup> whom he finds moving away from the forms as discrete existences and towards an understanding of the forms as real continua. As continua, the forms can function as a basis for scientific knowledge and for predicting future events, while themselves being subject to growth and habit-taking. When the forms cease to be brute seconds and become general thirds, “laws of nature” become (as they were for so much of the history of western thought) the “course of nature”<sup>374</sup>; these general, continuous forms then take on an evolutionary character, and those who seek to acquaint themselves with them recognize that they are engaged in an enterprise that must be

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<sup>371</sup> This view goes back to Aristotle. Cf. *Metaphysics*, M, 1078b30 “But whereas Socrates did not regard his universals as separable nor his definitions they (i.e. Plato and his followers) attributed separate existence to them and gave to this class of realities the name of Ideas.”

<sup>372</sup> And they have taken up the forms without considering the problems – like the *Parmenides*’ “third man” argument—that will inevitably follow. (The irony for Peirce, of course, is that these scientists claim that laws of nature are not real all the while seeking after them.)

<sup>373</sup> Of particular interest for Peirce are the *Sophist*, the *Parmenides* and the *Theaetetus*. The sources are too numerous to mention here, but in addition to the sites already mentioned, cf. L463 on the *Theaetetus*; and CP 6.349 et seqq. as material evidence of the influence of *Parmenides*. Peirce’s engagement with Lutoslawski was very much concerned with the dating of the dialogues precisely in order to be able to situate the various understandings of the forms in their proper chronology; he agrees with Lutoslawski on the dating of the *Sophist*. See MS 434 p. 33 on the importance of a scientific chronology of the dialogues.

<sup>374</sup> See Peirce’s view on this in the Peirce-Langley correspondence on Hume and Laws of Nature.

marked by humility and fallibilism.<sup>375</sup> Furthermore, this enterprise must be carried out in community, since it will only be over the course of generations that real discoveries will be made.

Now it is plain how Plato helps to answer this third prejudice as well, since it rests upon the second. This prejudice is deeply rooted in both empirical scientific and theological camps. Peirce recounts that by A.D. 1800

committee after committee of the most distinguished members of the French Academy of Sciences had reported positively that no stones ever fall from the sky. Scientific prejudice was even more opposed to a belief in that than to the possibility of human flight. Why, the prejudice was so rooted and so diffused that even an English Bishop, though I dare say he was given in the pulpit to thundering against “science falsely so called,” chancing to be in Sienna one day when a whole shower of stones fell, white-hot, I suppose, in a public square in that city, wrote home that he had received the testimony of so many and so competent witnesses of the occurrence that—what? That he was convinced, think you? Oh, no, prejudice, especially scientific prejudice, is too strong for that, but that—he “did not know what to think.” You know that, nowadays, it is estimated that ten millions of these stones fall on the earth’s surface every twenty-four hours!<sup>376</sup>

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<sup>375</sup> Since we have not got and cannot expect to have the ‘God’s-eye view,’ as Joseph Ransdell calls it (Ransdell, *op.cit.*, p351).

<sup>376</sup> MS 856: “A Logical Criticism of the Articles of Religious Belief,” ca. 1911.

Peirce tells this story with obvious amazement. Scientific prejudice has infected all camps, even theological camps, which have tried to make fixities out of religious tenets just as scientists attempt to make fixities out of their doctrines.

But if, following Plato and Peirce, by “laws of nature” we really mean the evolutionary “course of nature” or a “habit of nature”<sup>377</sup> then we should not be surprised if these real evolutionary thirds arise not only out of brute seconds but out of some primordial possibility, or firstness, that underlies all reality.

Miracles, then, far from being violations of laws of nature, become new events which must be added into the grand induction of science, and which are to be understood not as violent prodigies, but as eruptions of firstness as actual seconds which are quite in accord with the generality of the course of nature. That is, we should not expect the cosmos to conform absolutely to whatever laws of nature we may have formulated out of our limited experience of it. Peirce is arguing for a science that is willing to be challenged by unanticipated, prodigious events, one that exhibits what Peirce calls the “true spirit of Socrates.”<sup>378</sup> We must leave room for spontaneity in our science, and in our theology as well.

Along with the theologians, Peirce will allow for miracles to have a revelatory character; along with the scientists, he will require them to be susceptible to reasoned inquiry. But the prejudices of neither party will be allowed to interpret the miracles as totalizing or irrelevant. Miracles are revelatory inasmuch as they are a part of the unfolding of the course of nature. Every general is in some sense revelatory in this way, since there is always more in our abduction of a general than is immediately given in

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<sup>377</sup> Cf. MS 856.13, e.g.: “Consider what a law must be. I distinguish...between a law and an expression of that law, the former being a *habit of nature* and the latter a form of human statement” (italics mine).

<sup>378</sup> “How to Make Our Ideas Clear.” CP 5.406.

experience. Miracles then are reasonable inasmuch as there is a logic to them and they are susceptible to explanation, i.e. to being subsumed under some general principle yet to be discovered. I hardly need add that this is all the more reasonable if the cosmos turns out to be driven by what Peirce called *agape*, or “evolutionary love.”

We might ask, at the end of all this, whether Plato is really necessary in order to correct these prejudices, and the simple answer is no. Peirce could, if he wanted, simply assert what he has to say against scientific prejudice in his own voice, and indeed he does just this in numerous places, without needing to play ventriloquist to his dummy Plato. But Peirce’s turn to Plato is, I think, much more than a mere appropriation of a great name from the past in order to attribute to it his own ideas. Peirce’s intense study of Plato, almost entirely unpublished, attests to his real respect for Plato as a thinker. Furthermore, his turn to Plato, like his constant returns to Duns Scotus and Aristotle, is the lived evidence of his commitment to a real community of inquiry in which ideas are real, and in which, through the loving attendance of disinterested inquirers, the ideas themselves may be seen to grow. Most importantly, in one sense, Peirce’s ‘voice’ is one that has been deeply affected by Plato and Platonism, as I have been arguing all along. Plato has been present in Peirce’s thought about miracles from the start. That being the case, Peirce could not effectively excise Plato from a discussion of miracles. By his explicit inclusion of Plato in this conversation, Peirce recognizes the genealogy of his thought, and makes an important element in the conversation more explicit. Only in this way can the influence of Platonism be properly acknowledged and understood.

Peirce finds in Plato a fellow champion of synechism and tychism (although Plato, Peirce admits, was often unaware of how close he was to what Peirce later

articulated); an interesting subject for historiography; a distant member in the community of those who long to find things out; a model of a full-bodied ethics of inquiry; and in all of this, a reason to expect the miraculous. If I am right in all this, then our inquiries into Peirce's religious thought ought to pay attention to its Platonic character.

As we attend to history we must not allow our present prejudices to squelch the voice of other inquirers, even (perhaps especially) when they report prodigies in the course of nature, any more than we ought to commit the other error of embracing too quickly not only the miracle-testimony but the interpretation of the miracle as given by theologians or witnesses who are like the scientists in one important and undesirable way, namely, that the theologians view the miracles as the scientists view the laws of nature: as unquestionable fixities not subject to any future change, challenge, or growth.<sup>379</sup>

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<sup>379</sup> Peirce remarked that inquiry is not a solitary affair, and this essay is a case in his point. This chapter would be considerably weaker were it not for the assistance and comments of Doug Anderson, Klaus Oehler, Larry Cahoon, Ken Ketner, and two anonymous reviewers for its published version, to all of whom I am grateful.



## Chapter 7: Conclusion

In this dissertation I have given a preliminary historical account of the development of Peirce's thought in its relationship to Plato and Platonism. I say preliminary because much of that account remains to be told. Peirce read and was influenced by Plato and Platonistic thought throughout his life. Here I have only begun to sketch the range of Peirce's engagement with Plato.

The scattered nature of many of Peirce's commentaries on Plato may hinder Peirce from becoming widely recognized as an important commentator on Plato. Even so, his method of approaching Plato and the history of philosophy ought to receive recognition.

Peirce's interpretation of Plato represents a small but helpful addition to contemporary Plato scholarship. Just as Peirce and Marquand discovered that the received version of Philodemus' logic was in fact based on false opinions and not on the actual writings of Philodemus, so Peirce's reading of Plato suggests that there is another way of reading Plato than has been suggested by Plato's other interpreters. Derrida called Platonism the underlying assumption of the history of Western metaphysics, and it may be doubted that this has yet been overcome. Over against traditional interpretations of Plato's metaphysics, Drew Hyland and John Sallis have claimed that there is no such thing as Platonism, i.e. that Plato has no systematic or coherent philosophy or metaphysics.

Peirce affirms with Derrida that Western philosophy has been permeated by Platonism. Plato's thought has, like a bacillus, spread through Western thought. Like a bacillus, it has grown and evolved as it has spread. Each of its offspring bears some

resemblance to its progenitor, but each also bears the stamp of its environment and of its own spontaneous evolution. Even in the record of Plato's thought, preserved in his dialogues, what might be called Platonism in his early thought differs from his later thought. Evolution is not limited to biological growth. Thought itself may be said to grow, and this is what Peirce claims about his own thought. One of Peirce's autobiographical fragments expresses this nicely: "Indeed, out of a contrite fallibilism, combined with a high faith in the reality of knowledge, and an intense desire to find things out, all my philosophy has always seemed to me to grow."<sup>380</sup>

In this way, Peirce affirms Hyland's point as well, at least to a degree. Hyland claims that there is no consistent philosophy that can be called Platonism in Plato's writings. Even the stylometry that Campbell, Lutoslawski, and Peirce used to date the dialogues can only give us a likely story about the development of Plato's thought. On top of that, even if we had an exact arrangement of the dialogues, we never have an unmediated access to Plato's thought. We only have access mediated through the palimpsest of dialogues history has delivered us. We never have access to a pure version of Platonism as Plato might have understood it—if Plato thought of such a thing at all.

Peirce's study of Plato's dialogues indicates that such access is neither necessary nor important, however. Our knowledge of Platonism is in this way like our knowledge of a word's etymology. In order to use a word, we need not know whether a word is natural or conventional, nor whether it has deviated from some perfect form, given to it by an originary rule-setter. What matters is that we understand something of the word's story. Words that form the vocabulary of a given language are real, and have real effects

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<sup>380</sup> CP 1.14.

on the world. Knowledge of the story of words helps us to use language better, and may help us to create new words that will further help knowledge to grow. So it is with Platonism. Whether Plato understood Platonism as an ideal rule-setter understands names is not as important as understanding the story of the growth of Platonistic thought. This dissertation may be understood both as a study of that growth and as part of its continuation.

Peirce's reading of Plato is itself an argument for reading the history of philosophy and for reading original texts. Thematizations of classical texts always leave out more than they include—this dissertation is no exception to that rule—and one of the greatest omissions may be the developmental story. This developmental story happens on three levels: ideas develop spontaneously, ideas have effects in thought and in the world, and ideas grow and spread generally. Ideas are not merely the product of a necessary historical dialectic, nor are they disconnected from the community and from the world in which the thinker finds herself.

Plato's dialogues are not a mere treasure trove of "gems of thought," but are "the record of the development of the thought" of one of history's greatest thinkers. The story of the development of Plato's thought is seen in the history of Platonistic thought after Plato, that is, in synechism. Plato's ideas (and his Ideas) have spread generally throughout the thought of the world. The idea of laws of nature, or of the 'course of nature,' is itself a version of Plato's realism. Laws do not exist, but they have real effects, and they have real characteristics regardless of whether they are thought by some thinker. In this regard, the key assumption of modern science, i.e. that reality regularly constrains what may be believed, has a Platonistic ancestry. We find ourselves already

involved in a world that is shot through with Platonistic thought, and “truly to paint the ground where we are standing is an impossible problem in historical perspective.” If we are to understand our own intellectual milieu, we must do this at least partly historically.

Peirce’s method of drawing the history of philosophy is to attend to the story of the development of thought as at least as important as the contemporary results of thought. If thought and being are synonymous, as Peirce claims, then we should attend to the story of the development of thought just as we attend to biological evolution and cosmology. Peirce offers several practical rules for this kind of inquiry. Theories should explain the observed facts, and should not attempt to close off inquiry. Observers should remain open to discovering unusual ‘swerves’ or developments in intellectual history, even if other historians have not observed them. Inquiry should take place in community, and this includes the community of history. In this case that means reading original texts and not merely reading commentaries. What all these rules assume is realism or objective idealism, and synechism. The ‘proof’ of the importance of these doctrines lies in their practice and in the consequences for inquiry of not holding them to be at least provisionally true.

Peirce’s claim that we are in thought does not mean that we are inescapably determined by thought. We are, it is true, constrained in our thinking by the history of thought, just as we are constrained in our speech by the development of our language. But this development is one that rests on novelty, and nothing prevents our inventing new words, or assigning new meanings to old ones, or learning new languages. In the same vein, nothing prevents thought from growing and expanding. Ideas spread continuously, becoming more vague as thought grows. This was true of Plato’s thought and Peirce’s

thought in their lifetimes, and it is true of Platonism and Peircean Pragmaticism since their deaths. By reading the history of thought we come to understand the story of our own thought and so to gain fresh insight into present problems and their possible solutions.

Plainly, the record of Peirce's lifelong reading of Plato constitutes a significant contribution to both Plato and Peirce scholarship. From it emerge both a new picture of Plato's metaphysics and a richer story of the development of Peirce's categories in their historical context. Additionally, Peirce's reading of Plato holds potential for reinvigorating discussions among historiographers concerning the weighing of historical data, as William Pencak and Joseph Brent have suggested. It also holds promise, as I have argued, for re-thinking the relationship between scientific and religious thought. I have made this case in terms of miracles, but I think it could also help resolve other conflicts concerning mysticism and both religious and scientific myths about origins. I have begun to develop this along the lines of Peirce's response to Emersonian mysticism. If mysticism is seen as a form of abduction, then perhaps we can begin to ask how the abductive inferences of the mystic may be subjected to deductive and inductive tests. At a time like ours when discussions of origins seem to generate more heat than light, Peirce's broad Platonistic evolutionism and his profound semeiotic may provide the beginnings of a rapprochement between those who insist that the cosmos is infused with meaning and those who insist on the primacy of spontaneity or of the mechanisms of evolution. But these are bigger problems than can be addressed here, and it has not been the purpose of this dissertation to resolve them. Its purpose has rather been to study the history of thought without intending that such study should provide solutions to practical

problems determined in advance. Historical inquiries are preliminaries to further study. *Historiai*, as Aristotle called them, disclose what we have to work with, so that further studies may begin. Histories, stories of the real development of thought, may thus be rational and logical accounts, just as much as more explicit studies in logic and scientific investigations may be. Peirce came to understand this through his reading of Plato, and all the more so as he read Plato's actual words in Greek. Plato understood it as well, and gave his dialogues as logical and rational accounts. It is rumored that Aristotle, known to us for his systematic analyses of logic, poetry, and the natural world, wrote dialogues as well. Late in his life Peirce tried his hand at writing dialogues in imitation of Plato, too. In doing so, he seems to have been doing just what Plato's Socrates did whenever he gave a whole conversation or even a story—often without resolution—in answer to a simple question.

For example, in Plato's *Republic*, Glaucon and Adeimantus ask Socrates to demonstrate that it is better to be good and to be thought evil than to be evil and thought good. A long and interesting conversation ensues, but it is not at all plain in the end that Socrates has performed as requested. He concludes his conversation by telling a story, which he calls a *muthos*, the word from which our word "myth" is derived. Socrates does not claim to have answered the original question, but he does declare, "and thus, Glaucon, a tale (*muthos*) was saved and not lost."<sup>381</sup> This is not what Glaucon had asked for, and we might wonder why Socrates offers it as though it were an answer to his question. It would be wrong to assume that Socrates understood that word as synonymous with our cognate word. We commonly use the word "myth" to mean an

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<sup>381</sup> Plato, *Republic* 621B

untrue story, as in “urban myth.” However, in ancient times, the word *muthos* was nearly synonymous with *logos*. Homer, for instance, used the two words interchangeably. By Socrates’ time, *logos* and *muthos* had begun to diverge in meaning. *Muthos* meant a narrative account, or a true account of speeches, while *logos* had begun to mean an account in propositions. From *logos* we get our word “logic.” Benjamin Jowett, in his nineteenth-century translations of Plato’s dialogues, frequently translated *logos* as “rational account” in order to distinguish it from *muthos*, which he frequently translates by its English cognate or by “tale.” Plato seems to understand *logos* and *mythos* as being quite similar in meaning, if not identical. Plato’s *Gorgias* ends as the *Republic* does, with a *mythos*. Socrates introduces this *muthos* with these words: “Hear, then, as they say, a very fine rational account (*logos*), which you consider a myth (*muthos*), as I think, but I consider it a rational account (*logos*).”<sup>382</sup> In giving these stories, these *muthoi*, Socrates ensures that the replies he gives do not bring inquiry to an end but continue it. Perhaps this is why Aristotle says that “Philosophy (i.e. the love of wisdom) begins in wonder...even the lover of myths is in a sense a philosopher, for the myth is composed of wonders.”<sup>383</sup> Perhaps this is also why, when he retired to his estate at Chalcis, Aristotle is reported to have said “The more alone I am, the fonder I have become of myths.”<sup>384</sup> Implicit in Socrates’ method is the assumption that it is worth continuing to inquire into old problems of ethics, of religion, and of science, and that one does this as much by historical and narrative accounts as by propositional accounts. This in turn implies that some answers to these old questions may yet arise as inquiry continues, that is, that the problems have real solutions. In many of Plato’s dialogues, Socrates seeks solutions to

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<sup>382</sup> Plato, *Gorgias*, 523A

<sup>383</sup> *Metaphysics* 982b, my translation.

<sup>384</sup> Demetrius Phalerei, *Peri Hermeneias*, 144, my translation.

problems by first inquiring into what can be known about the terms and their referents. That is, he inquires into what can be known about forms. If those forms are stable and eternal existences, then the work of science is to inquire into them, identify them, and then to move on. If, on the other hand, the forms themselves are evolutionary, then the work of science is to be able to give an account of their development. Such an account must necessarily be as much a *muthos* as a *logos*. That is, it must be as much a narrative of growth and change as an attempt to give propositional substance to what has been discovered.

What follows from this is that the way we conceive the cosmos has effects on the way we orient ourselves toward it. Our conceptions of what is there to be discovered will necessarily have an impact on the way we go about attempting to discover it and give an account of it. Certain kinds of accounts will do a better job than others of helping us to remain open to discovery. Mere physicalism, Lutoslawski's and Zeller's versions of history, Cartesian doubt and certainty, mystical claims of immediate knowledge (such as those found in Emerson, Henry James, Sr., or William James) and Heraclitean etymology all shut down certain investigations before they can even begin. In contrast to these, Peirce found the mysticism in Platonistic thought to be a helpful reminder of the importance of wonder. Aristotle reminds us that "the lover of myths is in a sense a philosopher." Her philosophy, as long as it remains only a story, is incomplete, and so she is only "in a sense" a philosopher. But without this story, the work of philosophy is also incomplete, just as scientific investigation grinds to a halt without hypothetical or abductive reasoning.



Peirce and Plato remind us that it is by the slow percolation of forms that the inner parts of the soul are reached. Peirce's philosophical faith lies in this: contemplation of some wonder, or of some relation in the world, of a mathematical problem or of an historical account will, if it is pursued with diligence, lead to worthwhile discovery.

## Bibliography

- Albieri, Sara. "Milagres e leis da natureza em Peirce e Hume." *Revista Latinoamericana de Filosofia*. 1996; 22(2): 207-222.
- Allen, R. E. *Plato's Euthyphro and the Earlier Theory of Forms*. London: Routledge and Kegan Paul, 1970.
- Anderson, Douglas R. and Groff, Peter S. "Peirce on Berkeley's Nominalistic Platonism", in *American Catholic Philosophical Quarterly*, 1998; 72:2, (166-177).
- Anderson, Douglas R. *Strands of System*. West Lafayette, IN: Purdue University Press, 1995.
- Anderson, Douglas R. "Peirce and Representative Persons," *Philosophy in Experience: American Philosophy in Transition*. Richard E. Hart and Douglas R. Anderson, Eds. New York: Fordham U. P., 1997. (77-90.)
- Anderson, Paul R. and Fisch, Max H. *Philosophy in America: From the Puritans to James, with Representative Selections*. New York: D. Appleton-Century Company, 1939.
- Arzarello, Ferdinando *et al.* "Abduction and Conjecturing in Mathematics." *Philosophica* (Belgium). 1998; 61(1): 77-94.
- Auxier, Randall. "Concentric Circles: An Exploration of Three Concepts in Process Metaphysics." *Southwest Philosophy Review*. January, 1991; 151-172.
- Ayer, A.J. *The Origins of Pragmatism: Studies in the Philosophy of Charles Sanders Peirce and William James*. San Francisco: Freeman, Cooper and Co., 1968.
- Ayers, Robert H. "C. S. Peirce on Miracles." *Transactions of the Charles S. Peirce Society*. Summer, 1980; 16: 242-254.
- Baldwin, James M. *Dictionary of Philosophy and Psychology*. Gloucester, Mass.: P. Smith, 1960; (first published 1901-1933).
- Benardete, Seth, Trans. *Plato's Theaetetus: Part I of the Being of the Beautiful*. Chicago: University of Chicago Press, 1986.
- Bernstein, Richard J. Ed. (Weiss, Smith, et al authors). *Critical Essays on Charles Sanders Peirce*. New Haven and London: Yale University Press, 1965.
- Betz, Joseph. "Dewey and Socrates." *Transactions of the Charles S. Peirce Society*. Fall, 1980; 16: 329-356.

- Boler, John F. *Charles S. Peirce and Scholastic Realism: A Study of Peirce's Relation to John Duns Scotus*. Seattle: University of Washington Press, 1963.
- Boulting, Noel E. "On Endymion's Fate: Responses to the Fear of Death" in Hudson, Yeager (ed.), *Rending and Renewing the Social Order*. Lewiston: Mellen Pr, 1996.
- Brandwood, Leonard. *The Chronology of Plato's Dialogues*. Cambridge: Cambridge University Press, 1990. (See also his article on the same subject published as chapter 3 of Kraut, 1993.)
- Brent, Joseph. *Charles Sanders Peirce, A Life*. Bloomington and Indianapolis: Indiana University Press, 1993.
- Carrera, Alessandro. "La Nascita della Filosofia dallo Spirito della Scrittura." *Itinerari Filosofici*. January-August, 1994; 4(8 9): 91-105.
- Chapman, John Jay. In DeWolfe Howe, M. A. *John Jay Chapman and His Letters*. Boston: Houghton Mifflin Company (The Riverside Press, Cambridge), 1937.
- Colapietro, Vincent M. "Charles Sanders Peirce, 1903 Harvard Lectures on Pragmatism: The Practice of Inquiry" in *The Classics of Western Philosophy: A Reader's Guide*, Gracia, Jorge J. E. (ed). Malden, MA: Blackwell, 2003; (453-459).
- Colapietro, Vincent M. "Transforming Philosophy into a Science: A Debilitating Chimera or a Realizable Desideratum?" *American Catholic Philosophical Quarterly*. Spring 1998; 72(2): 245-278.
- Colapietro, Vincent M. *Peirce's Approach to the Self: A Semiotic Perspective on Human Subjectivity*. Albany: State University of New York Press, 1989.
- Debrock, Guy and Hulswit, Menno. *Living Doubt: Essays Concerning the Epistemology of Charles Sanders Peirce*. Dordrecht, Boston and London: Kluwer Academic Publishers, 1994.
- Deledalle, Gérard. "Cosmology: Chaos and Chance *within* Order and Continuity: Peirce between Plato and Darwin" in *Charles S. Peirce's Philosophy of Signs: Essays in Comparative Semiotics*. Bloomington: Indiana University Press, 2000; (162-169).
- Deledalle, Gérard. "Semeiotic and Communication—Peirce and McLuhan: Media between Balnibarbi and Plato's Cave" in *Charles S. Peirce's Philosophy of Signs: Essays in Comparative Semiotics*. Bloomington: Indiana University Press, 2000; (127-136).

- Deledalle, Gérard. *Charles S. Peirce: An Intellectual Biography* (Translation of *Charles S. Peirce: phénoménologue et sémioticien*). Amsterdam and Philadelphia: John Benjamins Publishing Co., 1990.
- Deledalle, Gérard. *Charles S. Peirce's Philosophy of Signs: Essays in Comparative Semiotics*. Bloomington and Indianapolis: Indiana University Press, 2000.
- Deledalle, Gérard.. *Charles S. Peirce: phénoménologue et sémioticien*. Amsterdam and Philadelphia: John Benjamins Publishing Co., 1987.
- Deuser, Hermann. "Is there a Metaphysics of Community? A Continental Perspective on American Philosophy." Lincoln, Cathrine (trans), Lincoln, Ulrich (trans) *Journal of Speculative Philosophy*. 1997; 11(2): 79-96.
- Diogenes Laertius, I.4; tr. R.D. Hicks. Cited (as epigram) in Joseph Owens, C.Ss. R., *A History of Ancient Western Philosophy*. New York: Appleton Century Crofts, Inc, 1959. p. xvii.
- Dombrowski, Daniel, *Thoreau the Platonist*. New York: Peter Lang, 1986.
- Duban, James, *The Nature of True Virtue: Theology, Psychology, and Politics in the Writings of Henry James, Sr., Henry James, Jr., and William James*. Madison, Teaneck: Fairleigh Dickinson UP, 2001.
- Eisele, Carolyn. *Studies in the Scientific and Mathematical Philosophy of Charles S. Peirce*. The Hague: Mouton, 1979.
- Emerson, Ralph W. *English Traits, Representative Men & Other Essays*. London and Toronto: J. M. Dent and Sons, Ltd., 1927.
- Emerson, Ralph W. *Complete Writings*. New York: Wm. H. Wise & Co., 1929.
- Esposito, Joseph L. "The Development of Peirce's Categories", *Transactions of the Charles S. Peirce Society*. Winter, 1979; XV, 1:51-60.
- Esposito, Joseph L. *Evolutionary Metaphysics: The Development of Peirce's Theory of Categories*. Athens: Ohio University Press, 1980.
- Esposito, Joseph L. "Peirce and the Philosophy of History," *Transactions of the Charles S. Peirce Society*. Spring, 1983; XIX: 155-166.
- Feibleman, James. "The Relation of Peirce to New England Culture," in *The American Journal of Economics and Sociology*. Spring, 1944; 4.1:99-107.
- Feibleman, James. *An Introduction to Peirce's Philosophy, Interpreted as a System*. New York: Harper, 1946.

- Ficino, Marsilio. *Platonic Theology*. Michael J.B. Allen and John Warden, trans., James Hankins and William Bowen eds. Cambridge, Massachusetts: Harvard University Press, 2001.
- Fisch, Max H. "Peirce as Scientist, Mathematician, Historian, Logician and Philosopher", in *Peirce, Semeiotic and Pragmatism*, Bloomington: Indiana University Press, 1986; (376-400).
- Fisch, Max H. *Peirce, Semeiotic and Pragmatism*, Bloomington: Indiana University Press, 1986.
- Fisch, Max H. "Peirce's *Aristotle*: The Greek Influence in his later Philosophy." *Transactions of the Charles S. Peirce Society*. Fall, 1971; 7: 187-210.
- Fisch, Max H. "The Range of Peirce's Relevance", in *Peirce, Semeiotic and Pragmatism*, Bloomington: Indiana University Press, 1986; (422-448).
- Flower, E. and Murphey, M.G. *A History of Philosophy in America. 2 Volumes*. New York: G. Putnam's Sons, 1977.
- Gadamer, Hans-Georg, *Dialogue and Dialectic: Eight Hermeneutical Studies on Plato*. New Haven : Yale UP, 1980.
- Gerson, Lloyd P. "Plato's Development and the Development of the Theory of Forms," in Welton, 2002. 85-110.
- Gerson, Lloyd P. "The Study of Neoplatonism Today" Published online at <http://www.nd.edu/~plato/plato2issue/gerson.htm>, *The Internet Journal of the International Plato Society*. , Issue 2, August 2002.
- Gill, Christopher and McCabe, Mary M. *Form and Argument in Late Plato*. Oxford: Oxford University Press, 1996.
- Gosling, J. C. B. *The Arguments of the Philosophers: Plato*. London and Boston: Routledge and Kegan Paul, 1973.
- Goudge, Thomas A. *The Thought of C. S. Peirce*. New York: Dover Publications, 1950.
- Greenlee, Douglas. *Peirce's Concept of Sign*. The Hague and Paris: Mouton & Co., 1973.
- Gregory, Maughn. "Democracy and Care in the Community of Inquiry." *Inquiry*. Fall, 1997; 17(1): 40-50.
- Grube, G. M. A. *Plato's Thought*. Indianapolis: Hackett, 1980.
- Haack, Susan. "Two Fallibilists in Search of the Truth." *Aristotelian Society*. 1977; Suppl 51: 63-84.

- Haas, W.P. *The Conception of Law and the Unity of Peirce's Philosophy*. Fribourg: University Press, 1964; (especially pages 140-141.)
- Hardwick, Charles S. *Semiotic and Significs: The Correspondence between Charles S. Peirce and Lady Victoria Welby*. Bloomington: Indiana University Press, 1977.
- Harris, R. Baine, ed. *Neo-Platonism and Contemporary Thought*, in Two Volumes. Albany, NY: SUNY Press, 2002; (165-182).
- Hausman, Carl R. *Charles S. Peirce's Evolutionary Philosophy*. Cambridge: Cambridge University Press, 1993.
- Hedley, Douglas. *Coleridge, Philosophy and Religion*. Cambridge: Cambridge University Press, 2000.
- Heidegger, Martin, *Parmenides*. Andre Schuwer and Reihard Rojcewicz, trans. Bloomington: Indiana UP, 1992.
- Hilpinen, Risto. "Aristotelian Syllogistic As a Foundation of C.S. Peirce's Theory of Reasoning" in Sfendoni Mentzou, Demetra, *Aristotle and Contemporary Science Volume One*. New York: Lang, 2000.
- Höfdding, Harald. *A History of Modern Philosophy*. Vol I. B.E. Meyer, trans. USA: Dover, 1955. Especially pp. 69-78, chapter entitled "Religious Speculation: (Jakob Boehme)."
- Hookway, Christopher. *Peirce*. London: Routledge and Kegan Paul, 1985.
- Hookway, Christopher. *Truth, Rationality, and Pragmatism: Themes from Peirce*. Oxford: Clarendon Press; New York: Oxford University Press, 2000.
- Hulswit, Menno. "Semeiotic and the Cement of the Universe: A Peircean Process Approach to Causation." *Transactions of the Charles S. Peirce Society*. Summer 2001; 37(3): 339-363.
- Hume, David. *An Inquiry Concerning Human Understanding*. Ed. C. Hendel. Indianapolis: Bobbs-Merrill, 1955.
- Hyland, Drew A. "Against a Platonic 'Theory' of Forms," in Welton, 2002. 257-272.
- James, Sr., Henry, *Substance and Shadow: Or Morality and Religion in Their Relation to Life: An Essay Upon the Physics of Creation*. Boston: Ticknor and Fields, 1863.
- James, William, *et al*, *The Correspondence of William James*. Ignas K. Skupskelis and Elizabeth M. Berkeley, eds., Wilma Bradbeer, ass't ed. Charlottesville and London: University Press of Virginia. Vol. 7, 1999; vol. 8, 2000; vol. 9, 2001; vol. 10, 2002; vol. 11, 2002 .

- Jones, L. Gregory and Fowl, Stephen E. (eds.) *Rethinking Metaphysics*. Blackwell: Cambridge, 1995.
- Kelly, Derek A. "Architecture as Philosophical Paradigm." *Metaphilosophy*. JL O 76. 7: 173-190.
- Kelly, Derek A. "Arithmos: Toward a Neo-Pythagoreanism." *Philosophical Research Analysis*. Summer, 1976; 6: 2-4.
- Kent, Beverley. *Charles S. Peirce: Logic and the Classification of the Sciences*. Kingston, Ontario and Montreal: McGill-Queen's University Press, 1987.
- Ketner, Kenneth Laine, and Cook, Eds. *Charles S. Peirce: Contributions to The Nation*. Lubbock: Texas Tech Press, 1975-1978.
- Ketner, Kenneth Laine. *His Glassy Essence*. Nashville: Vanderbilt U. P., 1999
- Ketner, Kenneth Laine. "Peirce and Plato". Unpublished paper, copyright Kenneth Laine Ketner, Sept 2, 1999.
- Kevelson, Roberta. *Peirce and the Mark of the Gryphon*. New York: St. Martin's Press, 1999.
- Koyré, Alexandre. *Discovering Plato*. NY: Columbia UP, 1960.
- Kneale, William and Kneale, Martha. *The Development of Logic*. New York: Oxford Univ. Press, 1962.
- Kraut, Richard (ed.) *Cambridge Companion to Plato*. Cambridge: Cambridge University Press, 1993; (especially chapters 3, 4, 12, and 13.)
- Legg, Cathy. "Naturalism and Wonder: Peirce on the Logic of Hume's Argument against Miracles." *Philosophia*. June, 2001; 28(1 4): 297-318.
- Lewis, C.I. *a Survey of Symbolic Logic*. Ny: Dover, 1960. Esp. pp. 79-106 on Peirce's contributions to the development of symbolic logic.
- Liatsi, Maria. *Habilitationschrift*. (In progress, not yet published.)
- Lipman, Matthew. "Philosophical Practice and Educational Reform." *Journal of Thought*. Winter, 1985; 20: 20-36.
- Lutoslawski, Wincenty. "Polish Personalism." *Personalist*. January, 1952; 33:15-21.
- Lutoslawski, Wincenty. *The Origin and Growth of Plato's Logic*. London and New York: Longmans, Green & Co., 1897.

- Madden, Marian C. and Madden, Edward H. "Buffs and Rebuffs: Emerson, Parker and Thoreau." *Transactions of the Charles S. Peirce Society*. Winter, 1994; 30(1): 1-32.
- Margolis, Joseph. "Metaphysique radicale." *Archives de Philosophie*. JI S 1991; 379-406.
- McCabe, Mary Margaret, *Plato's Individuals*. Princeton: Princeton UP, 1994.
- McMullin, Ernan. *The Inference That Makes Science*. Milwaukee: Marquette Univ Press, 1992.
- Merrill, Kenneth R. "Hume's "Of Miracles," Peirce, and the Balancing of Likelihoods." *Journal of the History of Philosophy*. Ja 1991; 85-113.
- Meyers, Robert G. and Popkin, Richard H., "Early Influences on Peirce: A Letter to Samuel Barnett," in the *Journal of the History of Philosophy*. 31(4); 607-621.
- Miller, Willard M. "Peirce on the Use of History." *Transactions of the Charles S. Peirce Society*. Spring, 1971; 8 (2); 105-126.
- Miller, Willard M. "Further Thoughts on Peirce's Use of History." *Transactions of the Charles S. Peirce Society*. Spring, 1972; 8: 115-122.
- Moore, Edward C. and Robin, Richard S. *Studies in the Philosophy of Charles Sanders Peirce*. Amherst: University of Massachusetts Press, 1964.
- Muelder, Walter G. and Sears, Laurence. *The Development of American Philosophy*. Boston: Houghton Mifflin Company, 1940.
- Muirhead, J. H. *The Platonic Tradition in Anglo-Saxon Philosophy*. London: George Allen & Unwin 1931 (reprint: 1965); (especially pages 324-346, on Peirce and Platonism.)
- Murphey, Murray. *The Development of Peirce's Philosophy*. Cambridge: Harvard University Press, 1961.
- Nathanson, Jerome. *Forerunners of Freedom: The re-creation of the American Spirit*. Washington Ameri. Coun. Pub. Aff., 1941.
- Nesher, Dan "Peirce on Realism, Reality and Existence." In Kenneth Ketner, et al. eds. *Proceedings of the C.S. Peirce Bicentennial International Congress*. #23 Sept 1981 Texas Tech Press, (247-250).
- Nesher, Dan. "Peircean Epistemology of Learning and the Function of Abduction as the Logic of Discovery." *Transactions of the Charles S. Peirce Society*. Winter, 2001; 37(1): 23-57.



- Ochs, Peter. *Peirce, Pragmatism and the Logic of Scripture*. Cambridge: Cambridge University Press, 1998.
- Oehler, Klaus. "Two Forms of the Theory of Categories" In Ketner, Kenneth, (ed). *Graduate Studies: Texas Tech University*. Lubbock: Texas Tech Press, 1981; (335-342).
- Oehler, Klaus. "Protagoras from the Perspective of Modern Pragmatism." *Transactions of the Charles S. Peirce Society*. Winter- Spring, 2002; 38(1 2): 207-214.
- Olson, Scott A. "Plato, Proclus and Peirce: Abduction and the Foundations of Logic of Discovery" in R. Baine Harris, ed. *Neo-Platonism and Contemporary Thought, Part One*. Albany, NY: SUNY Press, 2002; (85-101).
- Pape, Helmut. "Laws of Nature, Rules of Conduct and their Analogy in Peirce's Semiotics," *Transactions of the Charles S. Peirce Society*. XX: 209-39.
- Parker, Kelly J. "The Ascent of Soul to Nous: Charles S. Peirce as Neo-Platonist" in R. Baine Harris, ed. *Neo-Platonism and Contemporary Thought, Part One*. Albany, NY: SUNY Press, 2002; (165-182).
- Pater, Walter. *Plato and Platonism*. New York: The Macmillan Co., 1901.
- Peirce, Charles S. *Pragmatism as a Principle and Method of Right Thinking: The 1903 Harvard Lectures on Pragmatism*. Turrisi, Patricia Ann, ed. Albany: SUNY Press, 1997.
- Peirce, Charles S. *Historical Perspectives on Peirce's Logic of Science*, ed. C. Eisele, two volumes. The Hague: Mouton, 1985. References are abbreviated "HP" followed by page numbers. Pages 1-585 are volume I, pages 586-1131 are volume II.
- Peirce, Charles Sanders, *Reasoning and the Logic of Things*. Ketner, Kenneth Laine, Ed. Cambridge: Harvard UP, 1992.
- Pencak, William. "Charles Sanders Peirce, Historian and Semiotician." *Semiotica*. 83-3/4 (1991), 311-332.
- Plato, *Republic*. Allan Bloom, trans. (no city) Basic Books, 1991.
- Plato. *Platonis Opera*. New York: Oxford University Press.1995.
- Plato. *Complete Works*. Cooper, John M. (ed). Indianapolis: Hackett, 1997.
- Plato. *The Dialogues of Plato in Two Volumes*. Benjamin Jowett (trans.) New York: Random House, 1892.

- Potter, Vincent. *Charles S. Peirce on Norms and Ideals*. Worcester: University of Massachusetts Press, 1967.
- Potter, Vincent. *Peirce's Philosophical Perspectives*. Colapietro, Vincent, (ed). New York: Fordham University Press, 1996.
- Press, Gerald A., ed., *Plato's Dialogues: New Studies and Interpretations*. Lanham: Rowman & Littlefield, 1993.
- Putnam, Hilary. *Pragmatism and Realism*. London: Routledge, 2002.
- Putnam, Hilary. *Reason, Truth and History*. Cambridge: Cambridge University Press, 1981.
- Putnam, Hilary. *The Many Faces of Realism: The Paul Carus Lectures*. LaSalle, IL: Open Court, 1987.
- Ransdell, Joseph. "Peirce and the Socratic Tradition." *Transactions of the Charles S. Peirce Society*. Summer, 2000; 36(3): 341-356.
- Raposa, Michael. *Peirce's Philosophy of Religion*. Bloomington and Indianapolis: Indiana University Press, 1989.
- Reck, Andrew J. "Hartshorne's Place in the History of Philosophy." *Tulane Studies in Philosophy*. 1986; 34: 5-19.
- Reid, Thomas. *Thomas Reid's Inquiry and Essays*, Keith Lehrer and R. E. Beanblossom, (eds.) Indianapolis: Hackett, 1975.
- Reilly, Francis Eagan. *Charles Peirce's Theory of Scientific Method*. New York: Fordham, 1970.
- Rescher, Nicholas, (ed). *Studies in Epistemology*. Oxford: Blackwell, 1975.
- Richardson, Robert D., Jr. "Liberal Platonism and Transcendentalism: Shaftesbury, Schleiermacher, Emerson." *Symbiosis: A Journal of Anglo-American Literary Relations*. Plymouth, UK: University College of St. Mark and St. John. Vol 1.1, April, 1997, pp. 1-20.
- Richardson, Robert D., Jr. *Emerson: The Mind on Fire*. Berkeley: University of California Press, 1995.
- Rosen, Stanley, *Plato's Sophist*. New Haven: Yale UP, 1983.
- Sallis, John, *Being and Logos: Reading the Platonic Dialogues*. Bloomington: Indiana UP, 1996

- Schaeffer, Renato. "Pragmatismo e Percepcao Sensorial: E a Teoria de Peirce, Dewey, Mead identica a de Aristoteles?" *Cognitio*. 2000; 1: 102-116.
- Schiller, Ferdinand Canning Scott. *Plato or Protagoras? Being a Critical Examination of the Protagoras Speech in the Theaetetus with Some Remarks Upon Error*. Oxford: B.H. Blackwell, 1908.
- Schneider, Herbert W., *A History of American Philosophy*, 2<sup>nd</sup> ed. New York: Columbia University Press, 1963.
- Sfendoni Mentzou, Demetra. "Peirce on Continuity and Laws of Nature." *Transactions of the Charles S. Peirce Society*. Summer, 1997; 33(3): 646-678.
- Skagestad, Peter. *The Road of Inquiry: Charles Peirce's Pragmatic Realism*. New York: Columbia University Press, 1981.
- Smith, John E. *The Spirit of American Philosophy*. New York: Oxford University Press, 1966.
- Smith, John E. *The Spirit of American Philosophy*. Ny: Oxford UP, 1966.
- Stoudt, John Joseph. *Jacob Boehme: His Life and Thought*. NY: Seabury Press, 1968.
- Strauss, Leo and Cropsey, Joseph. *History of Political Philosophy*. Chicago: University of Chicago Press, 1987 (3<sup>rd</sup> Ed.)
- Taylor, Alfred E., *Platonism and its Influence*. NY: Cooper Square Publishers, 1963.
- Tejera, Victorino, *Plato's Dialogues One by One: A Dialogical Interpretation*. Lanham: University Press of America, 1984.
- Thesleff, Holger, *Studies in Platonic Chronology*. Helsinki: Societas Scientiarum Fennica, 1982
- Thesleff, Holger, *Studies in Plato's Two-Level Model*. Helsinki: Societas Scientiarum Fennica, 1999.
- Thompson, Manley. "Abstract Entities and Universals." *Mind*. July, 1965; 74: 365-381.
- Thompson, Manley. *The Pragmatic Philosophy of C.S. Peirce*. Chicago: University of Chicago Press, 1953.
- Trufant, Laurel Warren. *Metaphors in the Construction of Theory: Ramus, Peirce, and the American Mind*. (Ph.D. Thesis, University of New Hampshire, 1990.) Ann Arbor: UMI, 1991.

- Van Ophuisen, Johannes M., ed. *Plato and Platonism*. Washington: Catholic UP, 1999.
- Vlastos, Gregory, *Socrates: Ironist and Moral Philosopher*. Ithaca: Cornell UP, 1991
- Weeks, Andrew. *Boehme*. Albany: SUNY Press, 1991.
- Welton, William A., *Plato's Forms: Varieties of Interpretation*. Lanham: Lexington Books, 2002.
- Whitney, William D. (ed.) *The Century Dictionary*. New York: The Century Company, 1889, 1895, 1896. (Peirce wrote numerous entries, notably, "Platonic" for the *Century Dictionary*.)
- Wiener, Philip. "The Peirce-Langley Correspondence and Peirce's Manuscript on Hume and the 'Laws of Nature'", *Proceedings of the American Philosophical Society*, Vol 91, No 2, April 1947; (201-228).
- Wiener, Philip. "W. M. Miller on Peirce's Interpretation of the History of Science." *Transactions of the Charles S. Peirce Society*. Fall 1971; 7: 233-236.
- Windelband, W. *History of Ancient Philosophy*. H.E. Cushman, trans. New York: Dover Press, 1956.
- Young, Frederic Harold, *The Philosophy of Henry James, Sr.* NY: Bookman Associates, 1951.
- Zeller, Edouard. *Outlines of the History of Greek Philosophy*. London: Routledge & Kegan Paul ltd., 1963.
- Zuckert, Catherine, *Postmodern Platos: Nietzsche, Heidegger, Gadamer, Strauss, Derrida*. Chicago: University of Chicago Press, 1996.

## Appendix A: Peirce's Partial Translations of the *Cratylus*

**Note on transcriptions:** Items in curved brackets {} are my notes; square brackets [] are Peirce's. This transcription of MS 1161 includes only Peirce's English translation, omitting Peirce's Greek and his philological comments, most of which appear to be copied from his *Liddell & Scott's Greek-English Lexicon*. These three pages on the *Cratylus* are not mentioned in the Robin catalogue. The first page contains the Greek text of the opening lines of the dialogue, plus Peirce's interlinear translation:

### Peirce's Translation:

Herm: Are you willing, then, that also to Socrates here we submit the theory (or perhaps the subject, the question,) the question ??? What if we put the Question to Socrates here?

Crat: If you think well of it. If you like.

Herm: Cratylus says this, Socrates, that a name's correctness belongs by nature to each of the existents.

{CSP then dwells for a page-and-a-half on the philological question of the origin and meaning of *phuo*, *phusei*, *pephukian*.}

*Phuo* is one of the most ancient verbs, found in Latin *fui*, 'I grew' Eng to be. Originally apparently *phumi*.

{This is speculative – Liddell & Scott only say that Homer sometimes forms his verbs as though from *phumi*. CSP mentions "L&S" – probably Liddell and Scott (in print as early as 1852), (not likely Lewis and Short, since it is more concerned with Greek than Latin). Much of what he writes emphasizes the idea of growth, production, engendering. Being and nature both originally connected to growth. The third page resumes Peirce's brief commentary:}

With the dative (as here) [*phusei*?] it is the natural lot for that thing or person. Also impersonally it happens naturally (with inf.) and absolutely 'it is natural' Also absolute *ta phusei pephukota* natural precincts *anthropos pephukós* man as he is.

The idea of *Cratylus* is that everything grows a name,--fantastic, childish, and out-Platonizing Plato.

{After this, Peirce moves on to his dictionary. There may be many other such fragments in his writings, brief experiments into Plato's Greek, neglected by Robin as marginalia.}

**Transcription of MS 986** (I omit words Peirce struck out of his translation in favor of other translations)

{Page 1}

Translation of the beginning of  
THE CRATYLUS

Persons of the Dialogue: Hermogenes, Cratylus, Socrates.

Hermogenes: Are you willing (*bouleï*), then, to communicate our talk to Socrates here (*tode*)?

Cratylus: If you approve of it.

Herm. Cratylus here (*hode*) says, O Socrates, that a name's correctness belongs {to} each object by nature (*phusei pephukuian*) and that not that is a name which any men having agreed to call so do so call, uttering as a part of their own speech (*phones*) but that there is a natural correctness of names, the same for Greeks and all foreigners. (Vol I 383B)

{2} [Both Hermogenes and Cratylus had been, it is said very credibly, teachers of Plato. Hermogenes was an Eleatic and Cratylus a Heraclitan, these two schools being at the opposite poles of thought, the former as believing only in the One, the latter as the defender of universal Flux of matter. I cannot see that the absurd opinion of Cratylus about names was particularly consonant with the doctrine of Heraclitus. Many Germans say it is so; but I cannot admit it. In the dialogue Hermogenes is represented as decidedly dull and vague and Cratylus as rather ridiculous; while the Socrates of the dialogue makes fun of both, but especially of Cratylus.]

[Speech of Cratylus continued, 383B] I ask him then, for my part, if Cratylus is in truth a name for him. He acknowledges it. [The name *Kratulos* is connected with *ho kratus*, the mighty, thus illustrating the vanity of the man.] "And what for Socrates?" I said. "Socrates," said he. [The name Sokrates might naturally have been associated with *sozo* and be understood to mean "powerful in remembering," or in maintaining (the power) or simply "in preserving".] "Is not then, for all the other men, whatever name we call each one by is not this his name?" But he said, "Not your name, by any rate, is hermogenes, even if all men call you so." ['Hermogenes' naturally means "offspring of Hermes, the god of cunning and recondite knowledge." What follows makes the extreme inappropriateness of his name manifest enough.] When I inquired and showed my eagerness to know what it could be that he meant, he expressed nothing clearly but feigned ignorance, so as to perplex me, and pretended somehow that he in his own mind understood quite plainly about it that which if he wished to speak clearly would make my acknowledge to myself and to say whatever he said. [He does not perceive the irrelevancy of this.]

{3} Now if you can at all interpret the oracularity of Cratylus I should gratefully hear you; or still better what you yourself think about the correctness of names, I should listen to more gratefully still, if it is agreeable to you.

Sophocles: {sic!} O Hermogenes, son of Hipponichus, old is the saying that it is hard to get an understanding of fine things; and certainly that of names is no small part of understanding. Now had I heard under Prodicus his fifty-drachma exposition, which to the hearer pertains to being instructed concerning this, as that lecturer says, nothing would have hindered you from straightaway knowing the truth concerning the correctness of names. But as it was, I did not hear it but only the drachma exposition. Therefore I do not know what may be the truth concerning such things. I am ready, however, to search it out in common with you and Cratylus. But as to his not saying that Hermogenes is in truth your name, I somehow suspect that he is jesting. Perhaps he means that you try to make money, without succeeding<sup>385</sup>. But, as I was saying, since such matters seem to be abstruse, it is necessary postponing decision until we come to accord, to see

{4} whether it is as you say or as Cratylus says.

Hermogenes: And verily for my part at least, O Socrates, having full many times discussed with this man and with many others, I am not able to persuade myself that there is any other correctness of a name than convention and agreement. For to me it seems that should anybody have set a name to a thing this is the right one. And if after ward (*authis ge*) it be changed to another, and the old one (*ekeino*) be no longer pronounced (*kalei*) nonetheless does the latter rightly supersede the earlier (*echein tou proterou*), just as we change [the names] for our domestics. For not from each nature is any name produced for anything, but by institution (*nomoi*) and custom are they made habitual<sup>386</sup> and pronounced (*ton ethisanton te kai kalounton*.) But if it be otherwise, ready am I at least both to learn and to listen not only to Cratylus, but to anybody else whatever.

385 Socrates: Meantime perhaps there is truth in what you say (*ti legeis*), O Hermogenes. But let us look into it; what anyone would appoint to call each thing, that it its name, eh?

Hermogenes: It seems so to me.

Socrates: And whether he be a private person or a government (*polis*)?

Hermogenes: So I say.

{5} Socrates: What then? If I shall call any one of the things such as we now call “a man,” if I accost this as “horse,” and what we now call a “horse” as “man,” will publicly the name “man” belong to the same, and privately “horse”? And for the other privately “man” and publicly “horse”? Is this what you mean to say?

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<sup>385</sup> Hermogenes is the god of profit.

<sup>386</sup> “By...custom are they made habitual.” CSP struck out: ‘habituated’ for ‘are made habitual.’ “custom” = “*ether*”, dat. sing. of *ethos*. “Are made habitual” = *ethisanton*, related to *ethos*.

B. Hermogenes: It is my opinion at any rate.

Socrates: Come, then, tell me this. Do you recognize any difference between speaking truly and falsely? (*kaleis ti alethe legein kai pseude;*)

Hermogenes: I do.

Socrates: Would not then an assertion be true, which was false?

Hermogenes: Not in the least.<sup>387</sup>

Socrates: Would then, he who speaks of things as they are be true and he who speaks of them as they are not be false?

Hermogenes: Yes.

Socrates: Is it then the same thing to speak of things as they are and as they are not?<sup>388</sup>

Hermogenes: Not in the least.<sup>389</sup>

Socrates: And is an assertion true when the [C] whole is true but its parts are not true?

Hermogenes: No, the parts must be true. [Here he allows himself to be caught in a mindless {? difficult to read; might not be “mindless”} absurdity.]

{6} Socrates: Whether the large parts, but the small ones not need be true’ or all of them?

Hermogenes: All, at least, as I think. [He is getting further from the truth {or perhaps “track”}.]

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<sup>387</sup> These two lines are oddly translated. “Not in the least” translates *panu ge*, which is usually translated as “certainly.” But Peirce’s translation of the previous line, *oukoun eie an logos alethes, ho de pseudes* is also odd; a closer translation would be something like “then a true logos, this would not be [also] a false logos?” To which Hermogenes could reply, “certainly – no true logos is at the same time in the same way a false logos.” Peirce seems to be a little loose in his translation here. The shakiness of the handwriting, the uncertainty in translation (evidenced by the frequently struck out phrases) and his mistaking of “Socrates” for “Sophocles” all seem to point to the possibility that he was in pain or otherwise distracted while translating this. Compare this with what he writes to Lady Welby in his unpublished “Theaetetus” letter, where he says that he was too tired to do anything but read and translate Plato all day.

<sup>388</sup> Another odd translation: *Estin ara touto;* should be “Is this possible?” So that the whole sentence, *Estin ara touto logoi legein ta onta te kai mé;* should be “Is this possible, to speak by logos the things that are and the things that are not?” Then the answer would be “certainly.” I.e. it is possible to speak of things that are and it is possible to speak of things that are not, so from a name existence of the thing named does not follow of necessity. Peirce ignores the question of possibility (admittedly only implied in the verb *estin*) of two different kinds of speech and moves directly into a comparison of them, to have Plato show that they are not the same.

<sup>389</sup> Again, translating *panu ge*.



Socrates: Do you say then that there is any other part of an assertion smaller than a name?

Hermogenes: No this is the smallest. [Worse and worse!]

Socrates: And the name is then asserted as a part of the true assertion?

Hermogenes: Yes. [His dense stupidity is extraordinary.]

Socrates: It must be true, as you say.

Hermogenes: Yes.

Socrates: Is the part of what is false not false?

Hermogenes: I say it is.

Socrates: Is the name then truly or falsely said according as the assertion is so?

D Hermogenes: How should it not be so? [What astonishing absence of all reflexion upon the substance of what he says!]

## Appendix B: Letter to Victoria Welby, on the *Theâetetus*, July, 1905

L463

[p.1] [All notes in square brackets are mine; curved brackets are Peirce's.]

P.O. Milford, PA  
1905 July 16

My Dear Lady Welby,

A Hot spell having reduced me to a state of imbecility & incapacity for any exertion, I spent yesterday in reading the *Theâetetus*; and whether it was that utter relaxation of my entire psyche, it made an impression of novelty upon me such that I almost doubt whether I ever read it before in the original; and since I want to jot down my impressions about it, & also thank you for your kind interest in my interests which I have been so ungrateful as to leave unthanked so long, & since I am still in so stupid a state that I don't feel equal to any more vivacious epistle, I am going to sketch what I found so interesting in this dialogue. It is as lifelike as Plato's dialogues generally are. This young Harrow school-boy of remarkable brightness & real intellect is exhibited just as he is; and the first part of the dialogue is taken up with [p.2] arguments adapted to his level of mind against the nominalistic idealists which the Ionian philosophy had developed, - even occupying ground rather more like Grote than like Häckel. Their notions are that existence is a mode of motion, that one cannot cross the same brook twice, that man is the measure of things, that everything is relative. So Socrates asks the young fellow what perfect knowledge, *scientia*, *episteme*, consists in, - and the rule imposed upon the victim is that he must answer any question as well as he can. So he says perfect knowledge is perception by the sense, - far too profound an idea for him to have grown in the garden of his own mind, he doubtless got it out of the book of Protagoras. In fact, he admits pretty much that, and there is no pretension about the fellow, but certainly an extraordinary intelligence. But the arguments that strike him are about such as might have convinced a Harrow schoolboy of forty years ago of the falsity of the philosophy of Mill & Bain. If the [p.3] individual man is the measure of things, there can be no false opinion. Now not only some man but all men agree that everybody (except themselves) do entertain false opinions in great profusion & therefore it must be so & the doctrine falls to the ground. Of course, the true Socratic method of ascertaining what the conception of perfect knowledge was, - and the valid method, if the conception of the Greeks of that age be meant, - would have been to examine the sciences which they had successfully developed, & the list would have reduced itself chiefly to a single science, geometry (though of course it was as century & a half before Euclid, so that even that science was in an almost infantile condition. It is interesting to note that this is the very method that poor little *Theâetetus* at once starts when the question is put to him, mentioning Geometry & Grammar & Music & Drawing & Cordwainery (does anybody know nowadays what a cordwainer did?) The omission of Medicine & of Natural History (which Socrates in the *Phaedo* ((how can we believe the *Phaedo* is a mere fiction)) declares he was devoted to in his youth, so that it was a [p.4] recognized science)

shows the preoccupations of Attica; but on the whole Theætetus began very well. But the Platonic Socrates shuts up this sort of thing at once. He doesn't ask for an empirical conception of knowledge, because that would not accord with his notion of knowledge. He begs the whole question at the outset by saying that he wants the pure idea of perfect knowledge. He illustrates what he wants by giving a pure a priori definition of clay. It is earth made up into a dough with moisture (*ge hugro phuratheisa*). So dough is a pure Idea. So then Theætetus who has been studying something equivalent to the X<sup>th</sup> book of Euclid (quite beyond the majority of your Cambridge undergraduates) is able to derive from that algebraico-geometry a notion of what Socrates's notion of a notion of knowledge ought to be. Along about here occurs one of these passages of Socratic irony. Truly it is remarkable that irony should produce upon us such profound veneration; for though irony, - and Socratic more than any other variety, - consists in pursuing two contrary purposes at once, the impression produced by the Socratic irony is that of such thorough single-mindedness that those of us who are least apt to feel veneration (witness I[?]) cannot resist it in the case of this man. It is only in irony, or<sup>390</sup>

[p.5.1] before the very face of death, that such sincerity as his can find its expression.

As to Socratic Induction, although it was first in the field using the word "induction", or *epagoge*, although it agrees with the metaphor of the word, in leading instances, like troops, up against the fortress of a problem, and although it is included under the usual modern conception of induction, yet I maintain that the ethics of terminology ought to exclude this from the kind of thought designated by the name of induction. I will present my argument, which is too elaborate for a casual insertion, after I have done my commenting on the Theætetus.

[p.5.2] before the very face of death, that such sincerity as his can find expression.

I may as well mention, in regard to Socratic Induction, that although it was first in the field with it [sic] use of the word Induction, or *Epagoge*, and agrees with the metaphor, that of bringing data like forces up against the fortress of a problem, yet, in consequence of Aristotle's scientific definition in the Second Book of the Prior Analytics, chapter 23, (68b15) taking precedence by its systematic character, that Socratic "induction", ought not to be called Induction {There are three kinds of reasoning only. Namely, on first coming to a problem we must study the data and derive from them by thought a theory. This theory has some chance of being correct, in consequence of the fact that the human mind is a product of Nature and therefore its ways have some affinity with Nature's ways. This kind of reasoning by which theories are formed under the inspiration of the facts I call Abduction} because I think there is evidence to warrant the assumption that that scamp Apellicon by a blundering insertion of a single wrong word to replace an obliterated word in chap. 25 of the same book gave *apagoge* an entirely different meaning from that intended by [p.6] Aristotle. I will explain presently my line of reasoning, which has no other purpose or importance than to warrant {my use of the word "abduction" to denote the process of conjecturally setting up a theory suggested by the study of surprising facts to explain their being surprising. It is very remarkable that

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<sup>390</sup> Here there are two versions of page five. It is not clear from the manuscripts which page superceded which. The first one, beginning with my mark: [p.5.1] is from a page that is only half-written on, and bearing the (editor's?) mark "Another draft of (5)" at the head of the page.

few logicians have ever attempted to define the circumstances under which an explanatory hypothesis is called for. As far as I am aware there are but three theories on the subject. The first is that the character of the facts which calls for explanation is regularity among themselves, connection. This is the doctrine of Dr. Paul Carus set forth in his “Ursache, [??] und [??]”<sup>391</sup> and in the Monist Vol III pp 600 et seqq. The second is that the character of the facts which calls for explanation is non-regularity, isolation from other facts. This is the doctrine of Mr. John Venn in his Empirical Logic pp. 492 et seqq. The third theory is that the character of the facts which makes them require explanation is the violation of a warranted inductive conclusion (whether this have actually been drawn or not) or in other words these facts being justly surprising. This is my theory based on mathematical abduction from [p.7] admitted postulates. The principal rule of it is that the hypothesis, conjecturally adopted (I mean adopted as a mere possibility) should not be in itself more surprising (justly) than are the facts which it serves to explain.} Its conclusion is in the interrogative mood. That is to say it is related formally to the 3<sup>rd</sup> [?] Figure of Syllogism thus:

<b>3<sup>rd</sup> Figure</b> <u>Any</u> M is/is not P Some/Any S is not/is P ∴ Some/Any S <u>is not</u> M	<b>Abduction</b> <u>Any</u> M is/is not P Any/some S is/is not P ∴ Is any/some S <u>not</u> M?
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This “interrogative mood” does not mean the mere idle entertainment of an idea. It means that it will be wise to go to some expense, dependent upon the advantage that would accrue [sic?] from knowing that Any/Some S is M, provided that expense would render it safe to act on that assumption supposing [p.8] it to be true. This is the kind of reasoning called reasoning from consequent to antecedent. For it is related to the Modus Tollens thus:

<b>Modus Tollens</b> If A is True, C is not/is true But C is/is not true ∴ A is <u>not</u> true	<b>Abduction</b> If A is true, C is not/is true But C is not/ is true ∴ Is A <u>not</u> true?
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Instead of “interrogatory,” the mood of the conclusion might more accurately be called “investigand,” and be expressed as follows:

“It is to be inquired whether A is not true.” The reasoning might be called “Reasonings from Surprise to Inquiry.”

The cause (not the reason) of the validity of this mode of reasoning must be that man’s mind having been formed under natural influences has an indefinite tendency toward believing the truth.

But the reason for trusting to this method of reasoning is that reason of despair; i.e. that is, we have either to...[MS ends]

<sup>391</sup> Probably *Ursache, Grund, und Zweck: eine philosophische Untersuchung zur Klärung der Begriffe*, Dresden, 1883.

## Appendix C: Catalogue of References to Plato in Peirce's Manuscripts

### Catalogue of references to Plato in Peirce's manuscripts.

This catalogue attempts to identify all of Peirce's references to Plato. It is based mostly on my reading of Peirce's manuscripts, and in part on Klaus Oehler's "A complete list of places where Peirce mentions ancient philosophy or ancient philosophers in his unpublished papers," which Dr. Oehler has generously permitted me to use. (his catalog is 32 pages, finalized 21 April 1979. Oehler's original was destroyed several years ago in a car accident. Copies are held at the Institute for Studies in Pragmaticism at Texas Tech University in Lubbock, TX, and at the Peirce Edition Project at IUPUI in Indianapolis, IN.) Oehler's catalog only contains references to unpublished works. A preliminary list of references to Plato or to his dialogues in letters is appended to the end of this catalog. This catalog does not include Peirce's letters. "Robin Entry" gives the reference from Richard Robin's *Annotated Catalogue of the Papers of Charles S. Peirce* (Amherst: University of Massachusetts Press, 1967.)

MS #	Date	Robin entry	Notes
110		110. Note on Pythagorean Triangles A. MS., n.p., n.d., 1 p.	
166	1895	166. Elements of Mathematics A. MS., n.p., [c.1895], pp. 44-320, with many gaps and variant pages. Another draft of MS. 165.	
245		245. Illustrative Problem in Probabilities A. MS., n.p., n.d., 16 pp.	
248	1889	248. Chapter II. Mathematics A. MS., n.p., January 9-17, 1889, pp. 23-29.	
278		*278. [Unidentified Fragments] A. MS., n.p., n.d., over 1400 pp.  [MS. 278 Two pages removed to MS. 21; two pages removed to MS. 531; one page removed to MS. 881; one page removed to MS. 1147. ]	
283	1905	283. The Basis of Pragmaticism (Basis) A. MS., G-1905-1d, pp. 1-162, with pp. 3-6 missing and with pp. 112-119 discarded (p. 120 continues p. 111), plus 210 pp. of alternative sections and single page fragments. The following parts of this manuscript were published: p. 31 (section 8), pp 37-45 as 1.573-574; pp. 45-59 as 5.549-554; pp. 135-148 as 5.448n (footnote to Monist article "Issues of Pragmaticism"). Unpublished is the argument for the truth of pragmatism based upon the argument of the Harvard Lectures of 1903 which, CSP notes, were not published in his lifetime because	

		<p>of the failure of a "friend" to recommend them for printing. The meaning of "science." Heuristic, practical, and retrospective science distinguished. The meaning of "philosophy." Cenoscopic and synthetic philosophy. Methods of cenoscopic research. The idea of growth, as found in Aristotle and as applied to knowledge generally. The divisions of cenoscopy, with metaphysics as the third and last division and normative science as the mid-division. The deplorable condition of metaphysics: the necessity of logic and the normative sciences generally as propaedeutic to it. The hard dualism of normative science, its distinctness from practical science, and its relationship to psychology. Action, effort, and surprise: effort and surprise only experiences from which we can derive concept of action. Doctrine of Signs. Modes of indeterminacy; indefiniteness and generality; the quantity and quality of indeterminacy. The relationship of law and existence.</p>	
296	1907	<p>296. The First Part of an Apology for Pragmatism (A1) A. MS., n.p., [c.1907-08 or 18 months after "Prolegomena"], pp. 1-14; 14-32, with p. 25 missing (but with no break in the text); pp. 7-16 of another draft; plus 24 pp. of variants.</p> <p>This manuscript was intended as the fourth article of the Monist series of 1905-06, with two more articles following: The fourth article was to begin the apology, the fifth to have contained the main argument, and the sixth to have provided the subsidiary arguments and illustrations. More specifically, a rhetorical defence of the principle of pragmatism in the Popular Science Monthly issues of November 1877 and January 1878; system of existential graphs; the nominalism of Ockham and J. S. Mill; objective and subjective generality; Scholastic realism; the three ways in which an idea can be mentally isolated from another (dissociation, precision, and discrimination). Among the variant pages are some interesting biographical data, especially CSP's reflections on his father's "remarkable aesthetical discrimination" and his boyhood impressions of visitors, Emerson included, to the family home in Mason Street, Cambridge.</p>	
300	1905	<p>300. The Bed-Rock Beneath Pragmatism (Bed) A. MS., G-1905-1e, pp. 1-65; 33-40; 38-41; 37-38; 40-43.7; plus 64 pp. of fragments running brokenly from p. 1 to p. 60.</p> <p>This was to have been the fourth and ante-penultimate article of the Monist series. The following pages were published as indicated: 4.561n (pp. 31-399); 4.553n2 (pp. 37-38 of a rejected section). Omitted from publication are comments on the circumstances which led to writing the various articles of the Monist series. In this connection CSP notes, with some horror, the view attributed by the New York Times to William James that practical preference was the basis of pragmatism and considers what James probably meant to say, noting James's definition of</p>	

		<p>"pragmatism" in Baldwin's Dictionary of Psychology and Philosophy. The truth of pragmatism and its scientific proof. CSP reveals that he "had passed through a doubt of pragmatism lasting very nearly twenty years." Discussion of the nature of doubt: the confounding of doubt with disbelief. System of existential graphs; comparison of existential graphs with chemical ones; existential and entitative graphs. Studies of modality: CSP's early views and subsequent modifications. Among the fragments one finds CSP's disagreement with Cantor on the matter of pseudo-continuity which for CSP raises a question of the ethics of terminology.</p>	
307	1903	<p>307. Lecture III A. MS., notebook, G-1903-1. This lecture is subtitled: "The Categories Continued." Published: 5.71n (p. 9); 5.82-87 (pp. 16-34). Omitted: the three categories and their degenerate forms, if any. Genuine form of the representamen is the symbol. First and second degenerate forms are the index and icon respectively. Symbol, index, and icon analyzed with regard to degenerate forms. Given the three categories, all possible systems of metaphysics are divided into seven classes, e.g., into systems which admit only one of the three categories (three systems possible), systems which admit only two of the three categories (three systems possible), and that system which admits all three categories. The history of philosophy is examined for examples of each system. Schroeder's argument against admitting the Second Category into logic deemed naive, but not Kempe's argument against the Third Category. Kempe's system of graphs.</p>	
309	1903	<p>309. Lecture IV. The Seven Systems of Metaphysics A. MS., two notebooks, G-1903-1. Notebook I (pp. 1-37, of which pp. 1-4 and 12-37, with exception of 25-34, were published as 5.77n and 5.93-111 respectively). Unpublished: a discussion of the possible systems of metaphysics based on CSP's categories and their combinations. In CSP's opinion, the following philosophers were on the right track: Plato, Aristotle, Aquinas, Scotus, Reid, and Kant. Rejection of the idea attributed to the Hegelians that Aristotle belongs to their school of thought. Aristotle and the notion of esse in futuro. The Aristotelian distinction between existence and entelechy. Ockhamists and the rise of nominalism. Analysis of infinity (pp. 24-30). The reality of Firstness (pp. 31-35). Notebook II (pp. 38-62, of which pp. 38-45, 45-49, 49-51, 52-57, and 59-62, were published separately as 5.114-118, 1.314-316, 5.119, 5.111-113, 5.57-58 respectively). Omitted is a discussion of the reality of Secondness and a consideration of the position that feelings and laws (Firstness and Thirdness) are alone real (that to say that one thing acts upon another is merely to say that there is a certain law of succession of feelings). Experience is our great teacher; invariably it teaches by</p>	

		means of surprises.	
318	1907	<p>318. Pragmatism (Prag)</p> <p>A. MS., G-c.1907-1a and G-c.1907-1c, with no single, consecutive, complete draft, but several partial drafts end and are signed (Charles Santiago Sanders Peirce) on pp. 34, 77, and 86. An article in the form of a letter to the editor of The Nation was published as follows: 5.11-13 (pp. 1-7); 5.464-496 (pp. 7-45 of one draft and pp. 46-87 of another; the last two sentences of 5.481 were spliced by the editors of the Collected Papers). Also published as 1.560-562 were pp. 20-27 of still another draft. Omitted from publication: an analysis of James's definition of "pragmatism" (pp. 10-13 of one of the alternative sections). James's pragmatism again, followed by a discussion of his own position; the two distinct opponents of pragmatism (Absolutists and Positivistic Nominalists); pragmatism and religion; law distinguished from brute fact, not, as the nominalists would have it, by being a product of the human mind, but, as the realists assert, by being a real intellectual ingredient of the universe; triadic predicates as always having an intellectual basis, the evidence for which is inductive; thoughts regarded as signs, with signs functioning triadically; three kinds of interpretants emotional, energetic, and logical; the distinction between association and suggestion; the syllogism as an associative suggestion; "corollary" and "theoric" reasoning, of which an example of theoric deduction is the "Ten Point Theorem" of Van Standt (pp. 10-56 of a long draft from which pp. 20-27 were published). The three kinds of interpretants of signs; ultimate intellectual interpretants; pragmatism and common sense, with the meaning of critical common sense explained (pp. 43-59 of an alternative section of the long draft numbered 10-56 and described above). Kernel of pragmatism; concepts equated with mental signs; the object and interpretant of a sign distinguished; the problem of ultimate, or "naked," meaning; existential meanings; the meaning of an intellectual concept; qualities of feeling as meanings of signs, where qualities are neither thoughts nor existential events; the distinction between real and immediate (as represented by a sign) object, with immediate objects resembling emotional meaning and real objects corresponding to existential meaning; mathematical concepts as examples of logical meaning; the relationship of logical meaning to desires and habits (pp. 11-34 of another alternative section). Object and interpretant (meaning); the different units of interpretants (meanings); pragmatic definition and a prediction that pragmatism will occupy the same position in philosophy as the doctrine of limits occupies in mathematics (pp. 14-25 of an alternative section of the one described immediately above). Kernel of pragmatism; theory of signs; by inference a sign first comes to be recognized as such; the elementary modes of inference (pp. 12-30 of an alternative section). The divisions of</p>	



		<p>geometry; a problem in topics; the Census Theorem and Listing Numbers; the function of consciousness; concepts and habits; the vulnerability of James and Schiller arising from their (apparent) denial of infinity, including an infinite Being (pp. 62-77 of still another alternative section). An attempt to define "sign"; the sense in which utterer and interpreter are essential to signs; the immediate and real objects of signs; a brief note on the Census Theorem (pp. 12-90, with the exception of pp. 46-87 which were published).</p>	
328	1905	<p>328. Sketch of Some Proposed Chapters on the Sect of Philosophy Called Pragmatism A. MS., notebook, G-c.1905-6. Published, in part, as 1.126-129 (pp. 11-17). Unpublished are the reasons why pragmatism ought to be investigated. CSP came to the position of pragmatism through the study of the following philosophers and in the order noted here: Kant, Berkeley, the other English philosophers, Aristotle, and finally the Scholastics. Whether the principle of pragmatism is self-evident. The place of philosophy among the sciences. The branches of philosophy. Pragmatism and the question of the external world. Deduction, induction and probability, and their justification.</p>	
400	1893	<p>400. Book I. Of Reasoning in General. Introduction. The Association of Ideas A. MS., G-1893-5, pp. 9-83, 17-19; plus two drafts (5 pp.) of "contents." Published in part as 7.388-450, except 392n7. Unpublished: pp. 14-51, with exception of proposition 3 on p. 23 which was published as 7.417n21. History of the doctrine of association which begins with Aristotle and continues with the English writers of the seventeenth and eighteenth centuries, e.g., Digby, Locke, Hume, Hartley, Gay, among others, and the nineteenth-century English, German, and American thinkers, e.g., James Mill, Hamilton, Bain, Lewes, James, Herbart, Wundt. "Notwithstanding the writer's realism and realistic idealism, and consequent high appreciation of Schelling, Hegel, and others, and respect for German industry, he cannot but regard the English work in philosophy as far more valuable and English logic as infinitely sounder."</p>	
408	1893	<p>408. Division III. Substantial Study of Logic Chapter VI. The Essence of Reasoning A. MS., G-1893-5, pp. 85-180 (p. 163 missing) and a variant p. 85. Published, in part, in two places: 4.21-52 (pp. 89-146, with deletions) and 7.463-467 (pp. 168-173). Unpublished: the early history and literature of logic (pp. 85-88). Experience, reality, and belief-habits; the inner and outer world of man's experience; the</p>	

		law of association and its principles (pp. 147-165).	
411	1893	<p>411. Division I. Stecheology. Part I. Non Relative. Chapter VIII. The Algebra of the Copula</p> <p>A. MS., n.p., 1893, pp. 171-234.</p> <p>Material Implication. CSP introduces a new symbol -  for the (his) symbol -&lt;. All algebra based on simple definition of - . On the infinite series of logical terms (logically necessary consequences). Five types of logical propositions. The crocodile paradox (dilemmatic reasoning). CSP regards logical algebra as important as an instrument for logical analysis, but of no great importance as calculus. Rules of logical aggregation and composition.</p>	
425	1902	<p>425. Minute Logic, Chapter I. Intended Characters of this Treatise (Logic)</p> <p>A. MS., G-c.1902-2, pp. 1-170, with variants and a typewritten copy which differs only slightly from the original; pp. 1-50, with variants, of an incomplete first draft.</p> <p>Publication (2.1-118) is from CSP's typewritten copy, with a few omissions consisting of repetitions and asides.</p>	<p><i>CP</i> 6.349ff dialogue between CSP and "Velian". Footnote at <i>CP</i> 6.349 reads: "§§7 and 8 [i.e. <i>CP</i> 6.349-6.352] form a digression in ch. 4 of the Minute Logic (1902-3). The Velian is the stranger of Plato's Sophist, a dialogue which Peirce characterizes in the preceding, unpublished portion of the manuscript (see 1.584n) as being "purely a logical dialogue" with "all Hegel's faults and more than a glimmer of Hegel's merit." The present section is part of an attempt to give the Velian stranger "a little dose of his own cathartic." Ch. 1-3 and part of Ch. 4 were finished, and further chapters</p>

			were planned ([CP] 1.274, 1.277, 1.283n{tt}, 1.584n*; [CP]II, iii; [CP] 2.197, 4.227, 4.242, 4.244, 4.274, 4.323, 6.349n†).
427	1902	<p>427. Chapter II. Prelogical Notions. Section I. Classification of the Sciences (Logic II)</p> <p>A. MS., G-c.1902-2, begun February 20, 1902, pp. 1-291, with nearly 200 pp. Of variants; pp. 97-125, 190-192, 196-197, 244, 271-273 from alternative drafts.</p> <p>A later draft of MS. 426. Published, in part, as 1.203-283 (pp. 1-123, with omissions), 7.374n10 (pp. 125-127), 7.279 (pp. 140-142), 7.362-363 and 7.366-385 (pp. 192-242). From the alternative drafts, pp. 190-192, 196-197, 271-273 were published as 7.364, 7.365, and 7.386-387 respectively. Omitted from publication are the following: notions of family, genus, species; dynamics as a suborder of Nomological Physics; statics; theories of the constitution of matter and nature; hydrodynamics; dynamics of a particle and of rigid bodies; subfamilies of rigid dynamics; molar, molecular, and ethereal physics; cross-classification; subdivision of special nomological physiognosy; crystallography; "diagrammatic" history of astronomy; minerology; chemistry; the natural metric system; suborders of physiotaxy; families of natural history; genera of biology; physiography; physiognosy; genera and species of astronomy; geognosy. From alternative drafts, the following were omitted: the Genus language; classifications of language; races of mankind and the origin of the white race; resemblances between Polynesian and Semitic languages; the question of a common linguistic ancestor; Basque; agglutinative speech.</p>	
430	1902	<p>430. Chapter III. The Simplest Mathematics (Logic III)</p> <p>A. MS., n.p., 1902, pp. 2-108 (p. 9 is missing), with many rewritten sections.</p> <p>Some of the pages of this manuscript are dated; page 4, for instance, is dated January 2, 1902. On postulates (footnote on the corruption of Euclid's text and the confusion between "axioms" and "postulates"). Principles of contradiction and of excluded middle. The development of Boole's logical algebra. Logical depth and breadth. Composition and aggregation: De Morgan and Jevons. Beginning with generals, logic requires notion of inference; its primary aim is criticism of inference. Definition of an "individual." Confusion of collective identity with individual identity. Algebra of the copula of inclusion. The meaning of the mathematical "is." Algebraical consequence: constituents of a consequence; standard and potential constituents; proximates of a consequence. Scriptibility. The "vital" definitions of the algebra. Distinction between collective and distributive applicability of a disjunction to "v." The distinction between several and joint</p>	

		applicability to "v." Close and loose combinations and their denial. Definition of the generalized copula of inclusion in five clauses. Theorems and rules of the algebra. In the alternative sections: existential graphs (pp. 14-68); explanation of CSP's notation for Boolean algebra (pp. 35-45); algebra of the copula, formal definitions of "if," "and," "or," employed in defining ; and more on consequence (pp. 56-76)	
431	1902	431. Chapter III. The Simplest Mathematics (Logic III) A. MS., n.p., 1902, pp. 2-200 (p. 199 missing), including long alternative or rejected efforts. Page 37 is dated January 5, 1902; another page, January 28, 1902. Two definitions of "mathematics" analyzed: (a) mathematics as the method of drawing necessary conclusions, and (b) mathematics as the study of the hypothetical states of things. Mathematics does not require ethics; logic does, however. Preliminary dissection of mathematics into several branches. The important rules, theorems, and demonstrations of dichotomic mathematics. Simplest mathematics is a two-valued system, but even though its subject is limited, it does enter as an element into the other parts of mathematics, and hence is important. In regard to trichotomic mathematics, it is asked, "how is the mathematician to take a step without recognizing the duality of truth and falsity?" Fundamental fact about the number three is its generative potency. Philosophical truth has its origin and rationale in mathematics. A chemical analogy. In one of the alternative sections, there is a lengthy account of CSP's dispute with Sylvester over who should receive credit for discovering the system of nonions.	
434	1902	434. Chapter IV. Ethics (Logic IV) A. MS., G-1902-2, pp. 12-234 (p. 12 follows the first eleven pages of MS. 433). Published, in part, as 6.349-352 (pp. 20X-220). Unpublished: long footnote on the term "conscience," leading to eight rules having to do with the ethics of terminology and the governing of philosophical terminology. CSP proposes to list and examine twenty-eight conceptions or classes of supposed goods, e.g., the desirable in itself, but only gets as far as the fifteenth (all were taken from Greek philosophy, with Plato's conception of the ultimate good to have formed the basis of the fifteenth conception). At this point in the manuscript a long digression occurs which continues to the close. The digression concerns disputed points of Plato's life. In this connection, there is considerable material on the chronological order of the Platonic Dialogues as well as on Lutoslawski's researches. Sophistries in the Sophist, but Plato's definition of being as power approved. Various comments on the <i>Politicus</i> and <i>Timaeus</i> . For CSP, Plato's	200 pp on Plato's life and writings Source of "gems of thought" quote on history and philosophy.

		<i>strength lies in his ethics, not in his metaphysics and logic.</i>	
436	1898	436. Lecture I (1898) A. MS., n.p., 1898, pp. 1-34 (pp. 6-9, X 3, 15-26, 30, 33 missing). Reason and instinct. The wise man in matters of greatest importance will follow, not his reason, but his heart. Reason and religion. The contention that metaphysics is a guide for the soul is humbug. Moreover, the talent for reasoning is as uncommon as the talent for music, and the cultivation of the first requires a greater effort with fewer immediate rewards. CSP's bitterness is not easily restrained. He advises against philosophy as a career, shows his disdain of Harvard gentlemen and of publishers who refuse to publish treatises on logic on the ground that the author is not a university professor and that the work would not pay for itself.	
437	1898	437. Philosophy and the Conduct of Life (PL) A. MS., G-1898-1, pp. 1-31. Lecture I: published, in part, as 1.616-648 (pp. 1-16, 30-31). Unpublished material on the classification of the sciences and on the fact that every science grows into a more abstract science, one step higher on the classificatory scale. Asides on Plato.	
442	1898	442. The First Rule of Logic (FRL) A. MS., G-1898-1, pp. 1-38, with 3 pp. of variants. Published as 5.574-589, with omissions. Omitted were pp. 13, 18, 22-24, 36-38 on Alexandre Dumas (CSP's attitude somewhat disparaging), pure mathematics, and the notion that truth is ambiguous, e.g., that a proposition might be true in religion but false in philosophy. The theoretical and practical sense of "holding for true."	
447	1903	447. [Lecture I] A. MS., n.p., 1903, pp. 1-2, incomplete, (from a notebook). The beginning of an historical introduction to the subject of reasoning. Scientific form given to logic by Aristotle.	
452	1903	452. [Lecture I] A. MS., notebook, n.p., 1903, pp. 1-14. The purpose of logic; the division of logic into speculative grammar, critic, and methodeutic. Why "methodeutic" as a name is preferred to "method" or "methodology." CSP's exposition begins with logical syntax.	
606	1905	606. Chapter III. The Nature of Logical Inquiry (Liij) A. MS., n.p., [1905-06?], pp. 1-29, with 2 pp. of variants. "Maiotic" method of Socrates. The Athenian Schools and the emergence of Aristotle. Why the logical treatises of Aristotle have been called the "Organon." Discussion of the point of view that	

		logic is a practical science, with notes on the history of this point of view. Aristotle's distinction between practical science and art. Methodetic is not a practical science.	
646		646. (Definition: 4th Draught) A. MS., n.p., January 13 - February 13, 1910, pp. 7-58, with 16 pp. of variants. Syntax of thought. Traditional as opposed to the modern logic of relatives. An inconsistency noted in Aristotle's conception of a universal proposition. CSP's algebra of logic: Positive and negative terms are distinguished, with "positiveness" defined.	
648	1910	648. Definition A. MS., n.p., February 27-March 22, 1910, pp. 8-58, 58-60, plus 10 pp. of variants. Page 8 of this manuscript continues p. 7 of MS. 647, and is a later draft of that manuscript. Laplace's definition of "probability." Distinction between fact and occurrence, with Laplace attributing probability to occurrences rather than facts. Probability and states of mind. Background and history of the nominalist-realist controversy. Key figures in the controversy. Scotists and Ockhamists. Humanism and nominalism. Prantl's ignorance of Scholastic logic, especially in his <i>Geschichte der Logik</i> . <i>The first question to ask of a logician is whether he is a nominalist or a realist. Eleatic doctrines and nominalism. Epicurean theory of induction. The plight of original minds in America.</i>	
652	1910	652. Essays toward the Full Comprehension of Reasonings (Essays Preface) A. MS., n.p., July 12-17, 1910, pp. 1-27, 16-19. Purpose: improving the reader's power of reasoning. Criticism of German logic. Distinction between weak and unsound arguments. Necessary and probable reasoning. Probable reasoning as either inductive or retroductive. The three orders of induction are quantitative, qualitative and crude (simple enumeration). Qualitative induction mistaken for retroduction. Brief comments on the history of astronomy. CSP regards Kepler's investigation of the motions of the planets as the greatest feat of inductive reasoning ever accomplished. Fallibilism and the propositions of mathematics, logic, and ethics; fallibilism and common sense.	
675	1911	675. A Sketch of Logical Critic A. MS., n.p., [c.1911], pp. 1-28, 12-20, and 30 pp. of variants. "Logical critic" explained. Syllogistic recollection; unthought thought, belief and reality; belief as essentially a satisfaction, but not necessarily pleasant. The classification of the sciences and the place of logical critic among the sciences. The normative sciences; esthetics; logic as the science of symbols. The doctrine of signs	

		and the division of signs into icons, indices, and symbols.	
683		683. [An Essay toward Improving Our Reasoning in Security and in Uberty] A. MS., n.p., late, pp. 4-38, 12-28, and 16 pp. of variants. Another version of MS. 682. Mathematical and necessary reasoning. Preference for the word "uberty" over "fruitfulness." The necessity for technical terminology. CSP's ignorance of esthetics, with Schiller's <i>Aesthetische Briefe</i> mentioned as the only book he has read on the subject. But CSP writes of his keen but uncultivated sense of beauty. To illustrate this, he notes works of literature he admires. He also notes that there is little of the artist in him, his own literary style testifying to that. The history of scientific investigation of the problems of ethics. Sir Edward Herbert, Hobbes, Cumberland. The meaning of the word "real." Modalities.	
690	1901	690. On the Logic of drawing History from Ancient Documents especially from Testimonies (Logic of History) A. MS., G-1901-4, pp. 1-263 (continuous although there are no pp. 35, 137, 191), variant p. 15, a typed copy (with marginal corrections by CSP) and a lengthy (6 pp.) "Note on Collections" inserted at p. 52. Published as 7.164-255, with the exception of 7.182n7, which is from the Lowell Lectures of 1903 (Lecture VIII), and 7.220n18, which is from MS. 691.	typed copy, w/ "note on collections"; presented at AAS in Philadelphia in abstract; CSP reported on this abstract as well
691	1901	691. On the Logic of drawing History from Ancient Documents especially from Testimonies (Logic of History) A. MS., G-1901-4, 221 pp., fragmentary, with pp. running as high as p. 238. Published, in part, as 7.220n18 (pp. 93-95, with one deletion). CSP added following note: "These pages are to be used in the chapter of the Logic treating Deductive Reasoning. But the theory needs completion." See MS. 1344 for what appears to be an abstract of this logic.	CSP's note indicates that this was to be included in chapter of logic (1902?) treating deductive reasoning (this chapter apparently abstracted at MS 1344
692	1901	692. The Proper Treatment of Hypotheses: a Preliminary Chapter, toward an Examination of Hume's Argument against Miracles, in its Logic and in its History (Hist. Test.) A. MS., n.p., 1901, pp. 1-38, 29-40, and 13 pp. of variants. Opposition to the dualism of reason and instinct. Dogs can reason on occasions, with an example from CSP's experience. Rudimentary sense of logic ( <i>logica utens</i> ) and the sophisticated sense of logic ( <i>logica docens</i> ). Attack on modern books on logic. Precepts and hypotheses. The three stages in the life of a hypothesis, each stage governed by entirely different logical	Connects 690, 691 w/ 1344, 434

		<i>principles. Abduction, deduction, and induction.</i>	
746		746. [Introductory Remarks to a Course in Logic] A. MS., n.p., n.d., 9 pp. Historical notes on Aristotle and the Stoics. CSP attempts to answer the question: Is logic a science? His conclusion is that logic is the science that analyzes method.	
753	1907	753. [Reasoning] A. MS., n.p., n.d., pp. 3-7 and a variant p. 5. Draft of G-1907-1. Presumably for a lecture on the three kinds of reasoning. Examples of induction. Lutoslawski's and CSP's researches on Plato.	
776		776. The Rhetoric of Scientific Communications (Rhetoric of Sci or Rh of Sci) A. MS., n.p., n.d., pp. 1-6, 4-5. The problem of communicating discoveries. Scientific terminology. The best types of titles for scientific papers.	
778	1909	778. [Late Fragments on Logic and Science] A. MS., n.p., [c. 1909], pp. 5-15. From a rambling lecture touching on the kinds of reasoning, the classification of the sciences, nominalism and realism in medieval logic, and the lecturer's scorn for contemporary philosophy and ". . . the stupid and utterly antiscientific doctrine that a law of nature is nothing but a fabrication of the human mind."	
832		832. [Reason and Instinct] A. MS., n.p., n.d., 3 pp. Reason as inferior to instinct. Comments on the work of Zeller and other German logicians and historical philosophers.	
870	1901	870. What is a Law of Nature (Law of Nat) A. MS., n.p., [c.1901?], pp. 1-40, with variants. The meaning of the phrase "Law of Nature," and the history of its usage. The Aristotelian theory of growth and potentiality. Scholastic realism and substantial forms. The anti-Aristotelianism of Ockham. The Cartesian view of "law." Seventeenth-century atheism in England. Modern nominalism.	
921	1859	921. [Fragments from a Treatise on Metaphysics] A. MS., n.p., [1859-61], 16 pp., 4 pp., and 124 pp. A table of contents and notes for Chapter II, "On the Insufficiency of Dialectics." Dogmatical, psychological, and logical dialectics. Examples of the necessity of deflection and ordination. Probability of error. Notes for another Chapter II, "Nature of the Perfect." Proof that there are elementary propositions and that every conception is of boundless complication. Several other titles are distinguishable of which the comprehensive title is: "Matter	



		<p>Preparatory to Metaphysical Meditation." Other titles are as follows: "Proper Domain of Metaphysics" (May 21, 1859); "New Names and Symbols for Kant's Categories" (May 21, 1859); "That There is No Need of Transcendentalism" (May 21, 1859); "That the Perfect is the great Subject of Metaphysics" (May 21, 1859); "Explanation of the Categories" (May 22, 1859); "Of the Stages of the Category of Modality or Chance" (May 22, 1859); "Metaphysics as a Study" (June 1859); "On the Definition of Metaphysics" (July 1859); "Comparison of our Knowledge of God and of other Substances" (July 25, 1859); "All unthought is thought of" (July 25, 1859); "Of Realism and Nominalism" (July 25, 1859); "Sir William Hamilton's Theory of the Infinite" (July 27, 1859); "That We can Understand the Definition of Infinity" (October 23, 1859); "Two Kinds of Thinking" (October 23, 1859); "The Nature of our Knowledge of the Infinite" (October 23, 1859); "Of Objects" (October 25, 1859); "Of Pantheism" (October 25, 1859); "Why We can Reason of the Infinite" (October 25, 1859); "That Infinity is an Unconscious Idea" (October 25, 1859); "The Fundamental Distinction of Metaphysics" (June 30, 1860); "Elucidation of the Essay, headed All unthought is thought of" (June 30, 1860); "The Keystone of this System" (July 1, 1860); "The Logical and the Psychological Treatment of Metaphysics" (July 3, 1860); "The Infinite, the Type of the Perfect" (July 3, 1860); "The Orders of Mathematical Infinity" (July 13, 1860); "Summary" (December 16, 1860); "Domain of Metaphysics" (August 6, 1861); "Introductory to Metaphysics" (August 11, 1861).</p>	
930		<p>* 930. [On the Meaning of "Real"]  A. MS., n.p., n.d., 20 pp., including variants, numbered from 4-45 but not continuously.  The difference between "would be" and "actually is" ("was," or "will be"). History of word "real"; Duns Scotus and Kant on the real; CSP's definition. Mode of consciousness and the taking on of habits.</p> <p>[MS. 930 Three pages added from fragments.]</p>	
931	1868	<p>931. Questions on Reality  A. MS., n.p., [1868], 48 pp., with 2 pp. of an earlier draft.  The earlier draft of 2 pp. is an outline draft of G-1868-2a. Twelve questions asked and answered dogmatically. The questions are concerned with the possibility of ultimate cognitions; immediate self-consciousness; knowledge of the external world; truth and the agreement of logical conclusion with information; contradiction as not always signifying falsity; matter as not necessary to reality; thought and signs; the meaning of the "unknowable." The later draft concerns the proper method for determining how we think; self-evidentness and self-consciousness; the perceived and the imagined; our knowledge of the external world; thinking and signs; signs of the unknowable. Is there any cognition which is absolutely incapable of being known? Have we any intuitions?</p>	<p>"Thought, says Plato, is a silent speech of the soul with itself." (Qu.5, paragraph 2) (W, 2.172)</p>

		Some of the questions raised in the earlier draft are raised again and this time answered less dogmatically.	
973		973. [Transcription and Translation of Plato's Defense of Socrates] A. MS., notebook, n.p., n.d.	Partial translation of Plato's "Apology"
974		974. Plato's Dialogues A. MS., notebook, n.p., n.d. Plato's Dialogues are listed, with their length and probable date noted. There are two other lists of Dialogues, one of which is headed "probably spurious" and the other "decidedly spurious." For the rest, there is a summary and an analysis of sorts of the early Dialogues.	This is one of the more helpful MSS. Fragment. Plato and Socrates are, for our purposes, the same man. (Cf. CP 8.41) P. 13 on <i>Cratylus</i> , "this dialogue is far superior to any that precedes it, from a scientific point of view." Brief accounts of all the dialogues, with CSP's notes on them. Sophrosune says that 'the good is that which is expedient for a man' – this is one of the two errors of Plato. Certainly after 1897, due to stylometries, reference to Lutoslawski, but probably not later than 1898 due to statement about sophrosune.
975		975. Plato A. MS., n.p., n.d., 1 p. List of dates of the important events in Plato's life.	
976		976. Plato A. MS., n.p., n.d., 2 pp. Significant dates in the life of Plato. A note on Aristotle's references to Plato.	
977		* 977. Plato's Dialogues A. MS., n.p., n.d., 1 folded sheet and 1 p.	Chart, listing dialogues in order

		A. MS., n.p., n.d., 1 folded sheet and 1 p.	ot Thrasyllus' tetralogies and notes which are considered spurious or doubtful by ancient authorities. Compares order of tetralogies with stylometric order. Mentions Lutoslawski, dating this at least 1897, if not later.
978		978. Order of Plato's Dialogues A. MS., n.p., n.d., 6 pp. Chronology of Plato's Dialogues established by stylistic developments.	Order of Plato's dialogues. Essay/prose. Mentions "stylistic evidence", dating the MS. Discussion of order of dialogues not based on stylometry but on a) Platos' journeys; b) historical data mentioned in dialogues; and c) internal references to existence of other dialogues. Compare this with Lutoslawski's claim that CSP failed to take these things into account in L259.
979		979. [Chronology of Plato's Dialogues] A. MS., n.p., n.d., 6 charts. Chronology based, in part, on Lutoslawski's data.	
980	1901	980. Stylistic Development of Plato's Dialogues A. MS., n.p., November 3-5, 1901, 8 pp.	Stylistic development of Plato's dialogues – consists mainly of charts of stylometric data.
981		981. Conjectural Dates of Plato's Dialogues A. MS., n.p., n.d., 1 p.	Chart, comparing Hermann's and Jowett's translations in terms of length,

			with a column for dates. Right column lists spurious dialogues. Appears to contain data arrived at by stylometry, but does not mention stylometry, Lutoslawski, so cannot be dated by reference to them.
982		982. Lutoslawski. Plato A. MS., n.p., n.d., 4 pp. Notes on Lutoslawski's research on the Platonic Dialogues.	
983		983. Lutoslawski's Recalculations A. MS., n.p., n.d., pp. 1-3, and a single unnumbered sheet.	
984		984. Lutoslawski's "Relative Affinities" A. MS., n.p., n.d., 8 pp. Lutoslawski's miscalculations, with a list of corrections.	Stylometric chart but with emphasis on internal references to other dialogues, resulting in an unusual order for the dialogues. Compare with MS 978. WL's miscalculations, with a list of corrections (likely written 1898 just before his November letter to WL, or perhaps December 1898, just after receiving WL's postcard and criticisms.)
985		985. [Lutoslawski and a Report of Diogenes Laertius] A. MS., n.p., n.d., 1 folded sheet (3 pp.). CSP takes exception to Lutoslawski's refusal to credit Diogenes Laertius's report of what Hermodorus says is the truth concerning Plato's visit to Megara after the death of Socrates.	Specific objections to WL, with page numbers referring to OGPL.  (see also LW, p 197 on Megara - not important but interesting.) It is here that CSP refers to Lutoslawski (and all Poles) as "liars and swindlers",

			specifically calling into question WL's handling of testimony. On Ancient Testimony: Referring to Diogenes L., CSP writes "It is good historical testimony, open externally to no more doubt than hangs over all ancient testimony that is uncorroborated. Good logic requires its acceptance."
986		986. Translation of the beginning of the Cratylus (Cratylus) A. MS., n.p., n.d., pp. 1-6. Commentary accompanies the translation.	
987		987. Note to 944 B Laws A. MS., n.p., n.d., pp. 1-2. This manuscript is not in CSP's hand, but a note in the right-hand corner reads: "Jowett. Pierce [sic] notes."	Criticism of Jowett's free translation of the "Laws".
988	1860	988. Metaphysical Axioms and Syllogisms A. MS., n.p., May 30, 1860, 22 pp. Notes on the following Platonic Dialogues: Apology, Crito, Gorgias, Phaedo, Protagoras, and the Republic. (see note to right)	Robin is incomplete: it also discusses <i>Phaedrus</i> and <i>Theaetetus</i> .  This might contain earliest version of CSP's "pragmatic maxim," drawn from <i>Theaetetus</i> .
989		989. [Fragments on the Platonic Dialogues] A. MS., n.p., n.d., 8 pp. These fragments are mainly concerned with chronology based on Lutoslawski's data.	
990		990. [Plato's Philebus] A. MS., n.p., n.d., 1 p. Note on Euripides.	
992		992. Aristotle's Notion of Priority A. MS., notebook, n.p., n.d. The first few pages of the notebook deal with the classification of the sciences into sciences of research, review, and practical application and with the relative importance of experiences, actions, and thoughts. The remaining pages are a transcription, translation, and annotation of various sections of several works of	

		Aristotle but are primarily concerned with the notion of priority in chapters XII and XIII of the Categories.	
993		993. [Aristotle's Physics] A. MS., n.p., n.d., 3 pp.	
998		998. Consequentia. A. MS., from a notebook, n.p., n.d., 26 pp. Duns Scotus (extraction and commentary). Lutoslawski's study of Plato. Phaneroscopy. Tables concerned with classification of colors.	
1120		1120. Materials for an Impressionistic List of 300 Great Men A. MS., n.p., n.d., 8 pp.; plus over 250 pp. of fragments and scraps. In addition to the list of three hundred men grouped under several headings (the first rank, provisionally admitted, doubtful, provisionally excluded), there are biographical notes, questionnaires, and other means and efforts to develop the "power of observation" through an impressionistic study of comparative biography.	
1145		1145. [Annotated and Corrected Proofs for Baldwin's Dictionary: A-Dir] Proofs, n.p., n.d. These proofs were in CSP's possession. The corrections, however, are by Morsalli, another contributor to Baldwin's Dictionary.	
1146		1146. C. S. Peirce. Critical Notes to Baldwin's Phil. Dict. (Notes to B's D) A. MS., n.p., n.d., pp. 1-9, with rejected pp. 2 and 3. "Abacus" and "abduction."	
1147		1147. [Definitions for Baldwin's Dictionary] A. MS., n.p., n.d., 471 pp., with variants. The definitions are principally of logical words and include the following: "energy," "firstness," "image," "implicit," "information," "informed breadth," "informed depth," "insolubilia," "involution," "kind," "knowledge," "laws of thought," "leading principle," "logic" (over 100 pp.), "logical graphs," "mathematical logic," "matter" and "form," "maxim," "metrics," "middle term," "mnemonic verses," "modality," "mood," "multiplication," "multitude," "necessity," "negation," "norm," "nota notae," "numerical," "post hoc ergo propter hoc," "parsimony," "power," "precision," "predicable," "predicate," "probable inference," "proof," "quantity," "relation," "signify," "simple," "sophism," "subject," "sublation," "solution," "sufficient reason," "syllogism," "symbolic logic," "Tertium Quid," "theory," "truth," "uniformity," "unity," "universal," "universe," "vague," "whole."	

114 8		1148. [Notes for Baldwin's Dictionary] A. MS., n.p., n.d., 8 pp.	
115 6	1865	1156. [Notes for a Philosophical Dictionary] A. MS., notebook, n.p., [1865-69]. Extensive notes on philosophical terms from A to Z.	Note on "idea" at page 137. These definitions are from 1865-1869.
116 1		1161. Omissions and Errors of Oxf. Dictionary A. MS., notebook, n.p., n.d. Also included are notes on unphonetic spellings as well as notes on an experimental project for a little Greek dictionary.	Robin omits: a fragment of the <i>Cratylus</i> in Greek, CSP's translation, with some commentary. (Cf. MSS 986, 974.13, CP5.571)  Only contains opening lines, plus several pages (most likely from Liddell & Scott or Lewis and Short, contains a reference to "L&S") on the origin and meaning of Grk "Phuo," Lat. "Fui." Fui, according to CSP, means "I grew," not "I was."
123 1		1231. [Table of the Occurrence and Derivation of Words in Plato's Crito] A. MS., n.p., n.d., 2 pp.	
127 7		1277. Lecture V A. MS., G-1892-4, pp. 1-51. Presumably Lecture V or a draft of the fifth lecture of the Lowell Institute Lectures of 1892-93. Published, in part, as 7.267n8 (pp. 4-6). There is a reference to the preceding lecture, which concerned Chaldean astronomy. Further remarks on the Chaldees and their scientific superiority over the Egyptians. The Greek mind: sly, distrustful of induction, passion for unity. Thales and Pythagoras. CSP's criticism of Zeller's account of Pythagoras and the Pythagoreans. Cf. MS. 1275.	The relevant MSS for these lectures are MSS 1272, 1274-1279, 1281-1287, 1337, but Plato figures chiefly in 1277 and 1275, with the former being most important. See especially <i>HP</i> 204. Zeller, history of science.
131 1		1311. [On the History of the Lodestone] A. MS., n.p., n.d., pp. 2-6.	
134		1341. Chapter I. Of the Classification of the Sciences (I)	

1		A. MS., n.p., n.d., pp. 1-19, with a discarded p. 7. Traditional classifications of the sciences: Plato's, Capella's, the Seven Liberal Arts of the Roman Schools, Schemes of the Medieval University, Bacon's.	
134 4		1344. Abstract of Logic-Book. Introduction. Section 1. The Classification of the Sciences (Abstract) A. MS., n.p., n.d., pp. 4-29, 4, 11, 20-21, with 4 other discarded pp. and 2 pp. (pp. X and 3) the title of which is "Abstract of a Memoir 'On the Logic of Drawing History from Ancient Documents, especially from Testimonies'" (Abstract).	
160 4		"My Reading in Philosophy"	Read Aristotle in Greek, Plato in English up to this date



## **Vita**

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