

ON BELIEF: A PEIRCEAN ACCOUNT

A Thesis Submitted to the College of Graduate Studies and Research

in Partial Fulfillment of the Requirements for

the Degree of Master of Arts in the Department of Philosophy

University of Saskatchewan, Saskatoon

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Acknowledgments

I wish to acknowledge the exceptional support I have received in the writing of this thesis. I am grateful for generous financial support from the Social Science and Humanities Research Council of Canada and the University of Saskatchewan, which made this period of study possible. I am also grateful for the opportunity to work in a friendly, first-rate philosophy department, and wish to thank my professors, our superb administrative assistant, and my year-mates for making the process both easier and more enjoyable than it would have been without them. Special thanks are due to Mark Grover and Rachel Loewen Walker, comrades through Kant; Derek Postnikoff, the sharpest knife in the toaster; Aaron Warr, fellow fit philosopher; and Eric Dayton, supervisor extraordinaire. Finally, I would be remiss if I did not acknowledge the generosity and good humour of Mark Migotti and Cheryl Misak, both of whom act as witnesses for the vitality and ingenuity of Peirce scholarship in Canada.

Dedication

This work is dedicated first to my family, especially my parents, whose support has never wavered. It is also dedicated to my fellows at the Canadian Institute for Bownesian Studies, especially Mike Heney and Kristin Grant, who are jumbo large. Finally, this is for Nayyer Ghadirian, for reasons he knows best.

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Preface

I have adhered to standard citation practices for the Peirce literature wherever such standards exist. On that basis, references to Peirce's work appear in the following notation throughout:

The Collected Papers of Charles Sanders Peirce, Vol. 1-8: CP (volume #):(page #)

Writings of Charles Sanders Peirce, Vol. 1-6: W (volume #):(page #)

Pragmatism as a Principle and Method of Right Thinking: The 1903 Harvard Lectures on Pragmatism: PPM (lecture#):(page #)

Reasoning and the Logic of Things: The Cambridge Conference Lectures: RLT (lecture#):(page#)

References to articles cited appear in the following notation:

“Belief, Confidence and the Method of Science”: BCM,(page#)

“C.S Peirce on Vital Matters”: PVM,(page#)

“Peirce's Account of Inquiry”: PIA,(page#)

“The Key to Peirce's View of the Role of Belief in Scientific Inquiry”: PVRB,(page#)

1. Introduction

Belief is a central concept in the field of epistemology. It is also a fundamental aspect of human experience: we hold beliefs, argue over them, and try to justify them. We live by them, but we may kill for them or die for them. We judge ourselves and others according to their quality. We let them guide our lives even while striving to make them reflect the world accurately. Belief is, in a word, essential.

The purpose of this project is to present, explore and evaluate an innovative account of belief, that proposed by Charles Sanders Peirce, the founder of classical American pragmatism. Some philosophers have claimed that Peirce makes remarks about belief that are false or misguided, which undermine his otherwise solid epistemology, and, in turn, the systematic character of his philosophy. There are two major issues with Peirce's later theory of the role of belief in science. Firstly, it calls into doubt the relation between philosophy and everyday practice¹; and secondly, it appears at times to render Peirce's larger account of belief internally inconsistent.

I am prepared to argue that Peirce's remarks about belief, and particularly the role of belief in science, are consistent and pose no threat to the coherency of his epistemology or philosophical system as a whole. I will also argue that properly understood, the maverick comments that cause such distress to some interpreters of his work provide an important insight into the nature of the guiding principles of Peirce's philosophy as a whole. In order to furnish this argument with the correct weaponry, it will be necessary for me to do the following: as a starting point, I will explore the place of belief in Peirce's philosophy and review the standard interpretation of Peirce's theory

¹ The latter category is the one wherein Peirce places all action and all moral matters.

of belief, which is based on his early epistemology.² Next, it will be necessary to see where and how Peirce presents the comments on belief that draw the aforementioned criticism and concern from his interpreters. Assessing these comments in their original context will be helpful to the next stage of my analysis, where I will consider two methods of resolving what is often taken to be a disturbing undercurrent in Peirce's later thought with his less complex early account. Both of the methods currently being advanced by contemporary pragmatists are in favour of reassessing Peirce on belief in a helpful way, although each proposes to do so by different means: what I call the parsimonious Peircean position is in favour of excising portions of Peirce's commentary on belief in order to render what remains less controversial and more utile, while what I have labelled the conservative Peircean position is in favour of letting Peirce's comments on belief stand and simply reframing them within the context of his system as a whole. Both methods rely on considerable textual and interpretive legwork, as there is no authoritative map to the philosophical wilds of the Peircean architectonic. As such, this is first and foremost a research paper.

In the course of my researches, a new position will emerge, one that attempts to read Peirce critically and give him his philosophical due. Both of the accounts considered in my analysis are generous to Peirce in their particular ways, but both are also hampered by problems that can be resolved by a return to the original texts: by letting Peirce speak for himself and recognizing the role that his first principles play in the development of his account of belief, it becomes apparent that Peirce can escape the standard charges of contradiction with his original theory very much intact. I will argue

² For the purposes of this investigation, I delineate Peirce's early epistemology as the period from roughly 1865 to 1878, and his later epistemology as the period from 1898 to 1914. I will explain the rationale for this separation momentarily.

that disagreeing with Peirce about belief amounts to disagreeing with the first principles of his philosophy; to do so, while possibly perfectly intelligible, requires an argument at a methodological and meta-philosophical level that is outside of the scope of the accounts considered in this paper. Finally, I will conclude that whether one chooses to pursue that level of criticism or not, what must be admitted is that Peirce's account of belief is internally consistent without the imposition of revisions based on competing first principles.

2. Peirce's Theory of Belief

One of the attractive features of Peirce's work is its tremendous breadth – his intent was to give the world a new system of philosophy³, and much that is original and interesting arises from his dedication to this goal. Many think that Peirce was at least somewhat successful in achieving his lofty aims. Paul Weiss claims that “[Peirce] is the most original and versatile of America's philosophers.”⁴ Robert Brandom refers to the early Cambridge pragmatists, of whom Peirce was certainly the ringleader⁵, as founders of a third enlightenment.⁶ Whatever one might think of the validity of the claim that the inception of pragmatism constitutes a watershed in the history of philosophy, one thing is clear: Peirce's dedication to multiple research foci means both that his work is remarkably wide-ranging and that seemingly disparate areas of his work are deeply interconnected.⁷ This demonstrates the need for clarity in the project undertaken here. One cannot comprehend Peirce on truth, reality, science, or semiotics without reference to his view of belief. In the words of Canadian Peirce scholar Cheryl Misak, “Peirce's

³ The closest Peirce came to achieving this goal is arguably the unfinished “A Guess at the Riddle”, begun in 1887, which explores the application and ramifications of his innovative triadic ontology. Peirce made his dedication to the categories apparent very early in his philosophical development; they appear in embryonic form in the 1867 paper “On A New List of Categories” and continue to occupy Peirce for the rest of his intellectual life. In “A Guess at the Riddle”, he makes the sweeping statement that “To erect a philosophical edifice that shall outlast the vicissitudes of time, my care must be, not so much to set each brick with nicest accuracy, as to lay the foundations deep and massive.” W6:167.

⁴ Weiss, “Biography of C.S. Peirce” in Richard J. Bernstein (ed.), *Perspectives on Peirce*, p.12.

⁵ The era surrounding the inception of The Metaphysical Club, where pragmatism is purported to have been first advanced by Peirce, is a rich and interesting part of America's intellectual tapestry. There is no dispute to speak of regarding Peirce's role as founder of the distinctly American doctrine, which is well reviewed in the introduction to the third volume of the *Writings of Charles S. Peirce* and treated in more depth in Louis Menard's *The Metaphysical Club*.

⁶ Brandom, “The Pragmatist Enlightenment and Its Problematic Semantics”, *European Journal of Philosophy*, Vol.12, No.1, pp 1-16..

⁷ It is widely accepted amongst Peirce scholars that regardless of which area of his work one is interested in, a firm grasp of its development is deeply illuminating. Consider this advice from the Charles S. Peirce Society to entrants in its annual essay contest: “Entrants should note that scholarly work on Peirce frequently benefits from the explicit consideration of the historical development of his views. Even a submission that focuses on a single stage in that development can benefit from noting the stage on which it focuses in reference to other phases of Peirce's treatment of the topic under consideration.” (<http://www.peircesociety.org/essayContest.html>)

thought was constantly evolving: not much in his system lies static, isolated, or unconnected.”⁸ As such, gaining an accurate understanding of Peirce on belief can gain us a foothold in accessing his grand architectonic system. It should be noted here that our inquiry will proceed chronologically, from Peirce’s early epistemology to his later theory of belief, and from there to the contemporary era and a live debate concerning the interpretation of his views. The early period, which I frame as being roughly 1865 to 1878, covers Peirce’s earliest extant epistemological writings and his most famous published series, *Illustrations of the Logic of Science*. After that series was published, Peirce was much occupied by his work with the U.S. Coast and Geodetic Survey, as well as the development of his famous – or infamous – categories, which is primarily metaphysical work, and the advancement of his innovative logic. Though there is little doubt that there are significant connections between these various areas of Peirce’s work, new theses that are clearly epistemological in nature are scarce until the beginning of what I frame as Peirce’s later epistemology, which is the 1898 Cambridge Conference lectures. From this point until Peirce’s death in 1914, he was much concerned with disambiguating his own theory and contrasting it with what was then widely being popularized under the title of ‘pragmatism.’ In these later writings, notably also including the Harvard lectures of 1903, Peirce presented new ideas about central epistemological notions, including belief, and clarified their relation to his earlier views, which makes this later work invaluable. My hope is that the chronological progression through the evolution of Peirce’s work on belief will help to satisfactorily illuminate its inner workings, and ultimately resolve the contemporary debate as to which interpretation of that material is most true to Peirce’s system of philosophy. Thus, with a weather eye

⁸ Misak, *Truth and the End of Inquiry*, p.vii.

to its historical development and its theoretical connections, let us now embark on an exegesis of Peirce's account of the essential epistemic notion of belief.

2.1 Emphasis on Belief in Practice

A distinct emphasis on the practical properties of belief is apparent quite early in the development of Peirce's epistemology – at least as early as his draft titled “Questions on Reality”⁹, which would become the 1868 essay “Questions Concerning Certain Faculties Claimed for Man.” Published as the first in a series on cognition for the nascent *Journal of Speculative Philosophy*¹⁰, the business of this paper is comparing believing and conceiving as modes of knowing.¹¹ Here, Peirce concerns himself mainly with describing what belief seems like to us as believing subjects, rather than what kind of thing belief is in itself. The question in the discussion at hand is whether humans have an intuitive power whereby we distinguish the different types of cognitions that we experience. Peirce initially suggests that the pronounced differences between conceiving and believing support the existence of such a faculty. In discerning the two, we identify belief by the following key features: the knowledge of belief is essential to its existence, and belief is accompanied by “a peculiar feeling of conviction” that is absent in the case of mere conception.¹² Despite the fact that both of these characteristics are intuitively clear, particularly the latter¹³, Peirce ultimately determines that differences in the perceived quality of the state of belief as compared to the state of conception do not

⁹ MS 148: Winter-Spring 1868.

¹⁰ It is perhaps worth noting that this paper originates in metaphysical worries regarding the kinds of faculties that exist, though it quite naturally goes on to explore the existence of such faculties via our evidence for and against them, which takes us to the matter of how we might know of their existence. Indeed, C.F. Delaney describes Peirce's project in the series on cognition as getting at “the manner of reality itself”, by way of “ascertaining how we think.” W 2:xxxix.

¹¹ W 2:205.

¹² W 2:205.

¹³ The most brief experiment supports Peirce's claim here. Reflection on a believed proposition as compared to a doubted proposition quickly yields the conviction that one's attitude to each differs.

support the notion that belief requires any special power of consciousness. Belief, despite its unique characteristics in our subjective experience, does not owe its occurrence to a unique faculty.

What Peirce thinks we need to know about the nature of belief itself goes little further than this, as even his attempts to define belief directly are comprised mainly of propositions regarding its functionality. One such definition appears in “Questions Concerning Reality”, where he goes so far as to say that “it is a mere question of words whether we define belief as the judgment which is accompanied by this feeling [of certainty], or as that judgment from which a man will act.”¹⁴ The first Peirce terms “sensational” belief; the latter, “active” belief – and though they are conceptually separable insofar as one does not necessitate the other¹⁵, they generally occur in concert.¹⁶ The sensational belief is identified as it appears as “an object of consciousness”, while the active belief makes itself known by the observation of “external facts.”¹⁷ Despite the fact that we identify the presence of each type of belief differently, all that either alone or both together can comprise is a judgment. This reinforces Peirce’s previous assertion that despite the difference in the perceived quality of the state of belief as compared to the state of conception, belief does not require any special power of consciousness, in either the sensational or the active sense – the inception of belief-judgments is no different than that of conception-judgments.¹⁸ At this point, Peirce appears fully satisfied that he has determined belief to be no different in kind than any other sort of cognition, and also not

¹⁴ W 2:205.

¹⁵ Peirce states clearly that “neither...necessarily presupposes the other.” W2:171.

¹⁶ Since they are not necessarily *operationally* distinct, this division is of little concern at this point in our analysis, though we will return to it later.

¹⁷ W 2:171.

¹⁸ W2:205.

a product of any special intuitive faculty. Belief is no more than a type of judgment of which we are aware. “That I believe,” he states, “is quite evident.”¹⁹

This rudimentary definition can be contrasted to a later, more fanciful formulation that occurs in 1878’s “How To Make Our Ideas Clear”, where Peirce gives the following pithy explanation of the *definiendum*: belief is “the demi-cadence which closes a musical phrase in the symphony of our intellectual life.”²⁰ In explaining just what that means, Peirce again takes recourse to describing the properties of belief in a way that emphasizes the practical import of those properties. Belief, we are told, has “just three properties”: we are aware of it; it appeases the irritation of doubt; and it involves establishing rules for action.²¹ All three of these properties concern belief as it seems to us or performs for us: we notice when we believe a particular proposition; in believing that proposition we ease any doubts that we may have previously held with respect to it; and we know what actions we are likely to perform on the habits built upon belief in that proposition.

Despite the ten-year window between “Questions Concerning Certain Faculties Claimed for Man” and “How to Make our Ideas Clear”, Peirce’s view of belief remains constant in its essential elements. Not only do the two separate definitions and discussions of the properties of belief presented in these papers confirm that Peirce is most concerned with practical aspects of belief – what it is like and how it operates for believing subjects – they also demonstrate a remarkable continuity in Peirce’s evolving philosophical views. Never at any point does Peirce express concern for belief-in-itself,

¹⁹ H1:116. Peirce’s suggestion that the state of belief is easily recognized relies on accepting the notion that one can identify such a state on the basis of the actions one is disposed to because of it. Although Peirce’s account does not rule out the ascription of actual cognitive content to belief, it cashes out the practical import of belief in primarily dispositional terms.

²⁰ W3:263.

²¹ W3:263.

for the *ding an sich* of the state of belief. Once satisfied that his account demonstrates why the significance of any given belief is merely its sensible effects, Peirce's interest in belief shifts to the particulars of its role: how it opposes doubt, ends inquiry, guides action, and aims at the truth.

2.2 Opposition to Doubt

The internal hallmark of belief, Peirce states, is “a peculiar feeling of conviction.”²² This is why, as we saw earlier, we can clearly separate the feeling of believing from that of doubting without positing some faculty that makes this distinction possible. Peirce seems to think that this sensational difference deserves remark on numerous occasions. Various, we are told that “there is a dissimilarity between the sensation of doubting and believing”²³; that doubt is “uneasy and dissatisfied” while belief is “calm and satisfactory”²⁴; and that doubt causes irritation while belief relieves it.²⁵

As I suggested earlier, everyday experience supports Peirce's somewhat bald assertion that we just can tell the two states apart. Let us consider a sample case: suppose that we have two students writing a midterm in ancient philosophy. One of these students has attended tutorials, done her reading, and completed a helpful review session the night before the test, while the other skips class occasionally, vaguely recalls that Plato and Socrates are Greek fellows, and spent the pre-test evening alternately complaining about her lot in life and frantically cramming Aristophanes' “Clouds”, which she takes to be veridical rather than satirical. What each student feels while writing the midterm will be

²² W2:205.

²³ W3:22. As a note regarding the continuity of Peirce's thought, it is encouraging for that thesis that very nearly the same passage occurs in “The Fixation of Belief”, W3:247.

²⁴ W3:22.

²⁵ W3:263.

as one would expect: the prepared student will believe that she knows the correct answers, and be relatively serene in the process of putting them to paper. By contrast, the ill-prepared student will doubt that she knows the correct answers, and experience considerable anxiety and discomfort during the test as a result. Each of us has experienced such feelings – if not in such a setting – and has little difficulty in differentiating them.²⁶ As Peirce says, “We almost always know without any experiment when we are in doubt and when we are convinced.”²⁷

This sensational difference; however, is not all that separates the mental state of belief from that of doubt. That difference is accompanied by an important practical difference: belief guides action, while doubt exerts only a limited force upon it.²⁸ This means that in addition to being able to separate belief from doubt on a sort of internal, *ad hoc* basis, we are also able to identify the two states by external hallmarks that appear as the practical consequences of the state in question manifest via behaviour. If we return to the case of the ancient philosophy midterm, it should be apparent that in addition to the difference in mental tranquility experienced by the students, behavioural differences would be apparent to an outside observer. We would expect to see the well-prepared student putting her reading and reflection to good use by writing steadily and confidently, while her less studious compatriot alternates between frantically scribbling and staring despondently into space.

²⁶ Consider: it is normal to say “I believed such-and-such”, but not “I thought that I believed such-and-such.” We appear to have a very high degree of transparency with respect to the states of doubt and belief, at least so long as we are being honest with ourselves and mindful of monitoring changes in our mental states.

²⁷ W3:20.

²⁸ W3:21.

Despite remarking repeatedly on both the sensational and the practical difference between doubt and belief, Peirce is careful to remind us that they are not different in kind, but merely in degree. Both are mental states which stimulate us in certain ways, and both have what Peirce terms “positive effects”, albeit different ones.²⁹ While belief conditions us to act a certain way, and act that way reliably, doubt can only stimulate us to try to destroy it and thereby attain the comfortable state of belief. As such, we might best summarize Peirce’s view on the relationship as similar to that of two forces working in harness: when belief stops pulling, doubt takes over, and vice versa. Without the irritation of doubt, we would never enter into the struggle to attain a state of belief; we would never be moved to inquire – and inquiry, in Peirce’s view, is the only legitimate method for the acquisition of true beliefs.

2.3 Belief & Inquiry

Peirce’s view on the relationship between belief and inquiry is perhaps best described in one of his most famous papers, “The Fixation of Belief.” Published in 1877 as the first in a series of six essays entitled *Illustrations of the Logic of Science*³⁰, this essay represents the unification of several strands of Peirce’s thought into the first reasonably complete expression of his epistemology. Here, Peirce’s project is to develop further the relationship between doubt and belief, and to emphasize the importance of inquiry, which he sees as the only acceptably scientific method of fixing belief. It is important in tracing the developmental arc of Peirce’s thought to note; however, that Peirce’s sustained interest in belief and inquiry manifested itself well before this celebrated essay reached publication in *Popular Science*.

²⁹ W3:22; W3:247.

³⁰ This series was published between November 1877 and August 1878 and, though incomplete, is cited by Max Fisch as the “Discourse on the Method” of the 19th century. W3:xxxvii.

2.3.1 Early Formulations of the Methods of Belief Acquisition

Peirce's four methods of fixing belief first appear in rudimentary form in the 1872 drafts of the first three chapters of his projected book on logic, variously titled "Logic, Truth and the Settlement of Opinion", "Investigation and the Settlement of Opinion", "Of the Difference Between Doubt and Belief", "Of Inquiry", and "Four Methods of Settling Opinion."³¹ Here, in various forms, Peirce introduces and outlines the methods of obstinacy, despotism³², popular opinion, and scientific investigation.³³

With respect to the method of obstinacy, Peirce observes that "This simple and direct method is really pursued by many men."³⁴ The guiding principles of the method in question are to dwell on that which is conducive to one's favoured belief and systematically ignore all else, ignoring also the inconveniences associated with such a manner of operating in the world. Regarding the motive for this method, Peirce suggests that it provides "a cheap pleasure" not easily obtained in the search for truth, which is fraught with error and disappointment.³⁵ Those who assiduously follow the method of obstinacy are likened to ostriches: "When an ostrich buries its head in the sand as danger approaches, it very likely takes the happiest course. It hides the danger and then calmly says there is no danger; and if it feels perfectly safe that there is none, why should it raise its head to see?"³⁶ Despite his obvious scorn for the lack of impetus to truth displayed by advocates of the method of obstinacy, Peirce also grants that if such people adopting this mode do not pretend to rationality, there is little to say in criticism, as all such critique

³¹ W3:vii.

³² Also somewhat pejoratively identified as the "method of the church". W3:19.

³³ Also labeled at some points, though not consistently, as inquiry or reasoning. For example, W3:15, W3:19.

³⁴ W3:24.

³⁵ W3:25.

³⁶ W3:25.

would be based in the value of reason. However, despite being unable to penetrate stubborn adherence to irrationality, it is still possible to criticize this method on a basis which should be intelligible even to its adherents: obstinacy with respect to beliefs simply does not work.³⁷ If it did, its ease would recommend it and there could be no valid objection, for any such objection would originate in the principle that logic is preferable to illogic, a principle clearly rejected by those who attempt to maintain their beliefs by obstinacy.³⁸ Practically, however, obstinacy comes up against recalcitrant experience rather quickly. As Peirce puts it, “the...cause of failure is that different people have different opinions and the man who sees this begins to feel uncertain.”³⁹ Uncertainty leads us from the comfortable state of belief into that of doubt, thereby undermining the effectiveness of obstinacy as a method of settling opinion.

Peirce theorizes that recognition of the lack of utility exhibited by the method of obstinacy may lead one to the view that since within every epistemic community we influence one another’s opinions, the thing to do is “fix belief, not in the individual merely, but in the community.”⁴⁰ This can be accomplished by permitting the business of belief-formation to be a business for the state, rather than the individual – hence Peirce’s label, despotism. He observes, perhaps somewhat tongue-in-cheek, that in nations with despotic rulers or ruling bodies, “When complete agreement could not otherwise be reached, a general massacre of all who have not thought in a certain way, has proved to be a very effective means of settling opinion.”⁴¹ Peirce also claims that this method has historically played a prominent role in upholding theological and political doctrines,

³⁷ As Peirce says, it is “unable to hold its ground in practice.” W3:25.

³⁸ Obstinacy is, after all, essentially irrational. W3:18.

³⁹ W3:15.

⁴⁰ W3:25.

⁴¹ W3:26.

citing Rome as his example.⁴² Despite the cruelty and atrocity that he ascribes to despotism, Peirce readily admits that “we must allow...its immeasurable mental and moral superiority to the method of obstinacy.”⁴³ He supports this statement by empirical means, claiming that the success of despotism is “proportionately greater” than that of obstinacy; in fact, he claims that it has worked “majestic results” in a certain sense – creating great works of architecture and ingenuity or, more convincing still, systems that have lasted to the point of being defined as epochs.⁴⁴ Peirce even goes so far as to say that “For the mass of mankind...there is perhaps no better method than this.”⁴⁵

Still, aside from concerns about the aforementioned cruelty and atrocity⁴⁶, despotism has two additional weaknesses. Firstly, to “force people by fire and sword to adopt one’s belief” is simply “not practicable in our days”⁴⁷; and secondly, even if it were still a viable method of fixing belief for the masses, “no institution can undertake to regulate belief upon every subject.”⁴⁸ Like that of obstinacy, the method of despotism is flawed in that it cannot effectively override the force of immediate experience – or at least, not on all topics, not without considerable effort, and not by the methods once used to propagate institutional beliefs so efficiently.

⁴² It should be noted that this example does not have a great deal of historical substantiation, but rather that Peirce introduces it as if it ought to be self evident and further remarks that despotism is the method in use “wherever there is a priesthood.” W3:26.

⁴³ W3:26.

⁴⁴ W3:26.

⁴⁵ W3:27.

⁴⁶ One might be alarmed at how quickly Peirce appears to have swept this concern aside, save for the fact that he is building towards an ultimate rejection of all methods save inquiry when it comes to the business of pursuing truth – one such truth, one would be tempted to say, is that despotism is cruel and atrocious.

⁴⁷ W3:15.

⁴⁸ W3:27.

What Peirce does view as successful in our day – most successful, in fact – is the method of public opinion, which he presents as a modified version of despotism.⁴⁹ This achieves much the same result as the method of despotism, in that it fixes belief on a community-wide basis. The main point of contrast is that it does so not by the use of force, but by “oratory and preaching and by fostering certain sentiments and passions in the minds of the young.”⁵⁰ Such practices lead to the development of a relatively unified body of doctrine within communities, so this method is scarcely less effective at eliminating opposing opinions than is despotism.⁵¹ Peirce suggests that unifying public opinion is so highly successful within communities that “[t]raditional belief remains undisturbed until one community comes in contact with another.”⁵²

The problem of intercommunity discourse clearly acts as a stumbling block for the method of public opinion. As Peirce puts it, “different communities, removed from mutual influence, will develop very different bodies of doctrine.”⁵³ The intersection of such competing bodies of doctrine inevitably leads to conflict, as each belief community involved is forced to either take up the method of obstinacy with respect to its preferred opinions or to engage in genuine discourse that will inevitably lead to doubt regarding the veracity of cherished presuppositions. This is likely true even more so today than in Peirce’s time, as the proliferation of the modern scientific worldview reaches parts of human civilization previously untouched by competing ideals.⁵⁴ Thus, like obstinacy and despotism, the method of public opinion can fix belief only in circumstances so narrow

⁴⁹ W3:15.

⁵⁰ W3:15.

⁵¹ One might even go so far as to say that it is as effective, just subtly so. W3:17.

⁵² W3:19.

⁵³ W3:17.

⁵⁴ Arguably, Nietzsche’s Twilight of the Idols has proved prescient in identifying this phenomenon.

that the influence of experience of anything wider than one's own community can be disregarded.

Having demonstrated the failure of the three methods described above to actually fix belief and stave off doubt in any lasting way, Peirce introduces us to the last method discussed in the draft chapters of his book on logic: that of reasoning, inquiry, or scientific investigation.⁵⁵ He is quick to point out that this method is naturally unpopular, so much so that it “will never be adopted when any of the others will succeed.”⁵⁶ Despite the instinctual animosity felt towards it by the mass of mankind, who quite sensibly prefer the sensation of belief to that of doubt and desire to avoid deliberately engaging in a course of analysis that may offer a good deal more doubt than the alternatives, scientific investigation has one great advantage: “it fixes belief more surely.”⁵⁷ Inquiry attains its privileged status in Peirce's account because of its methodological merits, which make it uniquely utile in the processes of human flourishing. Investigation alone leads “ultimately to a conclusion not dependent on the initial condition of belief”⁵⁸, because investigation alone connects belief to reality.⁵⁹

Peirce recognizes at this stage that his case is in-the-making rather than made, and is quick to acknowledge the presuppositions of his view. For example, he acknowledges that the notion of a belief that accurately allows us to navigate the real world presupposes a real world, the existence of which he adroitly argues is a well-supported hypothesis. The method of inquiry and the conception of reality on which it is based “remain ever in harmony”, which precludes the sorts of doubts that arise so quickly when one attempts to

⁵⁵ These labels appear respectively at W3:15; W3:27; and W3:17.

⁵⁶ W3:15.

⁵⁷ W3:15.

⁵⁸ W3:19.

⁵⁹ W3:27.

fit any of the other methods to one's experience.⁶⁰ Peirce also remarks that the notion that there is "some one thing to which a proposition should conform" is admitted by every mind, and supports further the hypothesis that there is a reality for beliefs to be about.⁶¹ Most significantly, "scientific investigation has had the most wonderful triumphs in the way of settling opinion."⁶² Simply put, it can do what the other methods discussed cannot. Peirce goes on to say that "[t]o describe the method of scientific investigation is the object of this book"⁶³ – a book that sadly was never completed, let alone published. Fortunately, the ideas begun in these early drafts did eventually take shape, and we have another source for Peirce's thoughts on the method of inquiry to turn to.

2.3.2 The Fixation of Belief: Strengthening the Case for Inquiry

Peirce scholars often divide his thought into phases, with the period encompassing the 1870s and much of the 1880s represented by some as a "logico-mathematical" or "methodological" period.⁶⁴ Given the unity of purpose that underlies the development of Peirce's thought during this phase, it is not surprising that he returns to the same themes on a number of occasions – indeed, it is what one would expect of an system emerging organically, where advances in one area require clarification or elucidation elsewhere in order to keep the whole coherent. Such is the case five years after the drafts of his logic book, where in the published version of "The Fixation of Belief" we find Peirce still committed to the essential elements of the four methods described above. What differs is

⁶⁰ W3:27.

⁶¹ W3:27.

⁶² W3:27.

⁶³ W3:28.

⁶⁴ Delledale, 3. In a different framework, the years 1872-1878 are identified by Max Fisch as Peirce's "cosmopolitan" period due to the amount of traveling Peirce undertook in the years under discussion. (W3:xxxv)

the inclusion of an additional method, the collapse of two previously separate methods into a single one, as well as the titles assigned to those methods and the degree to which Peirce develops each method, finally offering an assessment of each in relation to the others and to the goal of acquiring truth.

This considerably more refined account of the process of belief fixation emphasizes the importance of logic and the primacy of reasoning. Logic, Peirce wishes to remind us, is not a natural gift – in fact, he suggests that the faculty of drawing inferences is the last to achieve full development in human beings.⁶⁵ Despite this limitation of human nature, Peirce contends that “each chief step in science has been a lesson in logic”⁶⁶; in other words, that reasoning well has been the primary vehicle by which our knowledge of the world has been able to advance. Still, “in the absence of any facts to go upon we are happy and self-satisfied.”⁶⁷ Unencumbered by reason in such circumstances, we are extravagant optimists who are led to reason only through the effects of experience.⁶⁸ This familiar thesis echoes the message of Peirce’s logic book drafts and leads into a similar, though more developed, discussion of the fixation of belief.

Peirce begins by introducing the process of inquiry: it is brought on by the irritation of doubt, while leads to the struggle to attain certainty, and ends when doubt has been alleviated and a state of belief has been achieved. But Peirce is quick to point out that the struggle of inquiry is only ever begun because of the motive of doubt; else we are cheerful dogmatists who “cling tenaciously not merely to believing, but to believing just

⁶⁵ W3:242.

⁶⁶ W3:243.

⁶⁷ W3:245.

⁶⁸ W3:245.

what we do believe.”⁶⁹ This being the case, one might wonder how we ever come to believe what is true. Peirce sets out to demonstrate that inquiry is the only path to true belief by performing something of a *reductio*. He sets out the competing methods of tenacity, authority, and *a priori* rationalism with examples and elucidation, all towards the end of showing that inquiry is the only sure method for the fixation of belief.

As in “Towards a Logic Book”, Peirce begins with the method of fixing belief that is arguably most popular and certainly most convenient: tenacity.⁷⁰ If acquiring opinions is the only object of inquiry⁷¹, and having beliefs is like having certain habits, why not just solve questions by selecting an answer and repeating it to ourselves, further validating its claim to our defense by exposing ourselves only to evidence in its favour until it becomes so firmly entrenched in our minds that naught will move us to doubt its veracity? Indeed, Peirce says that “This simple and direct method is really pursued by many men.”⁷² It may even be deliberately adopted, as when one knows that a cherished belief may be forced into revision if certain information is addressed, and so one avoids being exposed to that information. In such cases, the peace of mind achieved by refusing even the possibility of doubt is so attractive that any inconvenience suffered by clinging to it is deemed to be worth the attainment of “a steady and immovable faith.”⁷³

If all that we could assess was the inner state of the believing subject – whether she is more inclined to doubt and discovery or belief for the sake of belief – Peirce thinks that we could make no judgment against her for adhering to the method of tenacity. To do so would amount to no more than saying that her chosen first principles differ from

⁶⁹ W3:247.

⁷⁰ “Tenacity” is the new label given to the method that Peirce previously referred to as obstinacy.

⁷¹ And Peirce is adamant that it is: “the sole object of inquiry is the settlement of opinion.” W3:247.

⁷² W3:249.

⁷³ W3:249.

ours: she has chosen to be irrational, so telling her that she should be rational will get us nowhere.⁷⁴ Yet even though the person who adopts this method “will not allow that its inconveniences are greater than its advantages”⁷⁵, that this is so can be empirically verified. Tenacity is unable to hold its ground in practice, as one inevitably runs up against the opinions of others or fails to succeed in significant courses of action in such a way as to introduce doubt, despite the agent’s best efforts to avoid it.

When tenacity fails because the opinions of others impinge upon one as significant, realization that their beliefs might be as important as one’s own comprises “a distinctly new step, and a highly important one.”⁷⁶ That important step leads us to the problem of how to fix belief for a community, a challenge answered by the method of authority. One possible authority is the church, another is the state.⁷⁷ Institutionalizing the right to choose beliefs for the community is a means of enforcing agreement and keeping contrary beliefs from being formed.⁷⁸ Again, despite the cruelties associated with this “most ruthless power”⁷⁹, Peirce maintains that the method of authority has mental and moral superiority over the method of tenacity - basically, because it gets things done. Nor are most people particularly troubled by their governing institution’s demand to submit to authority. Regarding this portion of humanity, Peirce declares scornfully that “[i]f it is their highest impulse to be intellectual slaves, then slaves they ought to remain.”⁸⁰

⁷⁴ W3:250.

⁷⁵ W3:250.

⁷⁶ W3:250.

⁷⁷ W3:251. In this version of the four methods, Peirce collapses the formerly separate methods of the church (spiritual) and despotism (secular) into a single method: that of authority.

⁷⁸ W3:251.

⁷⁹ W3:251.

⁸⁰ W3:251.

One might be surprised that Peirce is so permissive regarding the method of authority, but this acceptance is based solely on its practicability, which he ultimately finds unsatisfying.⁸¹ Despite the great success that institutions have historically had in fixing opinion on important matters, no institution can propose to fix belief on every matter. Rather, what are taken to be the pressing questions of the day are adjudicated upon by the authoritative body, and for the remainder each individual is left to go her own way. Overall, this succeeds best when there is no interaction between communities governed by different authorities, but even though intercommunity discourse is the quickest path to the rejection of authority, intracommunity discourse can undermine it in a similar fashion, if somewhat slower. Once a few individuals begin to critically assess the dogma espoused by their governing authority, it becomes apparent that the beliefs of their community are accidental, rather than universal; and the method of authority will inevitably be rejected in favour of another that does not suffer from this flaw.⁸²

Doubt regarding the caprice of beliefs held by others or oneself leads to a third method, and one which appears for the first time in “The Fixation of Belief”: the method of *a priori* rationalism. This third way proposes to let “the action of natural preferences be unimpeded...and under their influence let men, conversing together and regarding manners in different lights, gradually develop beliefs in harmony with natural causes.”⁸³ While it is the conflict of one’s own opinions with the opinions of others that leads one into this method, its goal is not merely to resettle one’s own opinions, but to achieve a

⁸¹ It is important to remember that Peirce is not doing social or political philosophy, nor is he engaged in an ethical discussion. His account to this point is descriptive and analytical, and becomes prescriptive only in the discussion of inquiry, and even then his prescription of scientific investigation is made out only to those who would aspire to be truth-seekers.

⁸² W3:252.

⁸³ W3:252.

consensus. Hence, the beliefs that are arrived at become privileged not because of their veracity, but because of their acceptability within the belief community. This means that *a priori* rationalism can provide a group of people with a much more stable belief set than those which would be arrived at by individual processes based on submission to authority or tenacious adherence to cherished conceptions. In addition to resolving intracommunity differences, the *a priori* method of discerning reasonable from unreasonable beliefs also offers a means of reconciling intercommunity disputes, as it grants no precedence to any belief on the basis of who espouses it. It relies instead on rational analysis that is available to believers in all communities. Peirce views these benefits as considerable, and proclaims the method of popular opinion “far more intellectual and respectable” than the methods of tenacity and authority.⁸⁴

Despite the elevated station Peirce grants the *a priori* method due to its employment of reason, he judges that “its failure has been the most manifest.”⁸⁵ Rationalism is meant to prevent the formation of capricious opinions on the basis of accidental factors, but still produces beliefs that are arguably the result of preferences or intellectual fashions. No connection to any aspect of the external world is assured, and as such, it is possible that one might wind up with a reasonable and consistent set of beliefs that nonetheless bear no relation to any facts and subsequently prove quite useless in the day-to-day business faced by believers.⁸⁶ Ultimately, this means that rationalism is no great improvement over authority: instead of institutional authority, it is the authority of popular culture. Rather than a product of pure reasoning, the beliefs formed by its

⁸⁴ W3:253.

⁸⁵ W3:253.

⁸⁶ This is the greatest challenge to coherentism, which can seemingly operate in a state of complete disconnection from reality.

application are a product of reasoning in conjunction with a contingent set of circumstances. Peirce suggests that within the wider community of epistemic agents, there will be at least a few who will recognize that even with the application of *a priori* reasoning, which is by far the most legitimate method heretofore, at least some of their beliefs are produced by accidental causes and thus are doubtful. The doubts raised by the awareness that other, competing beliefs might be as reasonable as one's own leads to the rejection of this method and sparks the search for one that can produce beliefs that will survive the tests of both rational acceptability and experience. As Peirce says, "To satisfy our doubts...it is necessary that a method should be found by which our beliefs may be caused by nothing human, but by some external permanency – by something upon which our thinking has no effect."⁸⁷

Peirce's candidate for such a system is the final method discussed in "The Fixation of Belief": scientific inquiry. In order for this method to be operative, one has to accept what Peirce terms a fundamental hypothesis, which is that there are real things whose characters are quite independent of our opinions about them, but by which our faculties of perception are affected in accordance with regular laws.⁸⁸ This, then, is the great virtue of inquiry: performed correctly, we can determine via reasoning "how things really are."⁸⁹ Also, because beliefs formed in the application of this method connect to real states of affairs, no doubts regarding inquiry arise during its practice – which is a marked difference from the other methods assessed. The efficacy of beliefs formed via

⁸⁷ W3:253.

⁸⁸ W3:254. Peirce does defend his hypothesis, most notably by claiming that "Nobody...can really doubt that there are realities, or if he did, doubt would not be a source of dissatisfaction." It appears that Peirce thinks that anyone who does not accept his hypothetical step is not moved by doubt and so cannot participate in the practice of inquiry. Note also that this line of argument furthers the case begun in "Towards a Logic Book."

⁸⁹ W3:254. Again, Peirce is well aware that he is working under a hypothesis, which he takes to be well-supported, that there is a "way things really are."

tenacity, authority, and rationalism can all be challenged by recalcitrant experience. By contrast, since it incorporates experience, the test of the method of inquiry lies in its application: good reasoning leads to steadily fixed beliefs that are well-connected with reality and bad reasoning to beliefs that will be susceptible to doubt. That inquiry is preferable as a method is supported, Peirce says, by the observation that everyone uses scientific method as much as possible. While Peirce makes this assertion baldly, a simple survey of everyday modern methods supports his claim. For example, it is nearly inconceivable that advances in a field like medicine could be made by the application of tenacity, authority, or rationalism – unless by sheer accident.⁹⁰ Finally, the last and most practically significant point of praise that Peirce offers for inquiry is that it has “the most wonderful triumphs in settling opinion.”⁹¹ Once settled by genuine investigation, a belief is highly resistant to doubt, especially from such sources as authority or popular opinion. There is, Peirce concludes, no “living doubt” about the method of scientific inquiry.⁹²

Given the success and supportability of inquiry, we might well wonder why Peirce discusses the other methods at all, and in particular why he finds aspects of their application praiseworthy. The reason for this is that each of the other methods has some tangible advantage over scientific investigation, a “particular convenience of its own.”⁹³ Tenacity has the advantages of simplicity and directness, and given the sometimes tortuous discomfort that accompanies doubt in the process of inquiry, “It is impossible not to envy the man who can dismiss reason, although we all know how it must turn out

⁹⁰ The thought of beliefs within the medical community being controlled by rationalism is frightful in the modern scientific world view, though it surely was practiced not so very many centuries ago.

⁹¹ W3:254. Note that this is exactly the same turn of phrase used at W3:27.

⁹² W3:254.

⁹³ W3:256.

at last.”⁹⁴ Similarly, submitting to authority is a great comfort for many people, particularly the “peaceful and sympathetic”, who find it irresistible.⁹⁵ *A priori* rationalism might be especially appealing, as it has the bulwark of reason from whence to defend its conclusions, which are quite comfortable and unlikely ever to be seriously challenged by beliefs achieved through tenacity or authority.

Despite their particular advantages; however, the problem underlying all three methods – which is solved by inquiry – is that “after all, [one] wishes [one’s] opinions to coincide with the fact”, and there is no reason to suppose that this result could be achieved by any method save scientific investigation.⁹⁶ Because of its unique effectiveness in the employment of reason and experience, we should allow the reflective processes essential to inquiry their full weight. Peirce holds that though one might expect to experience a greater quantity of doubt in the pursuance of scientifically fixed beliefs, their steadiness and near immovability once achieved is worth the struggle. He ends the discussion of inquiry in this paper with a strong prescription for believers: “above all, let it be considered that what is more wholesome than any particular belief is integrity of belief, and...to avoid looking into the support of any belief from a fear that it may turn out rotten is quite as immoral as it is disadvantageous.”⁹⁷ What Peirce is saying here is that there is no belief that cannot be treated as a hypothesis of scientific inquiry, no belief that can attain protected status. Given that his account to this point has been largely descriptive, it is clear that we have now come to the real crux of Peirce’s position on

⁹⁴ W3:256.

⁹⁵ W3:256.

⁹⁶ W3:256.

⁹⁷ W3:257.

belief, that regarding which he feels strongly enough to offer normative claims. The message is this: the only road to the security of knowledge is inquiry.

Clearly, though the prose is polished and the connections between methods of belief fixation more eloquently presented, the account presented in “The Fixation of Belief” is a continuation of rather than a move away from Peirce’s early views in “Towards a Logic Book.” Later, in assessing the possible problems and provisos for the would-be Peircean, it will become apparent that Peirce remains true to the epistemological foundations laid in his industrious methodological phase for the remainder of his intellectual life. At this point; however, the appropriate place to turn is to the ramifications of Peirce’s insistence on scientific inquiry as the method *absoluta* for the fixation of belief. The result of the primacy of inquiry is that belief, on Peirce’s view, is fundamentally connected to both action and truth.

2.4 Belief & Action

Beliefs, according to Peirce, are the foundation for habits of action. Regarding any proposition that we may consider, either we do not actually conceive that proposition and our actions are unconcerned by that proposition, or we conceive of the proposition and act as if we had some belief.⁹⁸ And when we do believe, “there is a proposition in our minds which determines our conduct according to rule, so that our belief being known the way in which we shall behave may be surely deduced.”⁹⁹

Regarding any particular belief, if one had in its place a doubt, she would behave differently. Consider again our two students of ancient philosophy: the one who is well-

⁹⁸ W3:21. Peirce does include a third option, which is “it is mere chance how we act.” While this is an interesting thread of tychism in the midst of a work not directly on that theme, it is not particularly relevant to the discussion at hand.

⁹⁹ W3:21.

prepared behaves as if she is in possession of certain beliefs regarding the subject matter of her test; indeed, on that matter she possesses a belief set which is likely highly consistent and she acts accordingly, with confidence and certitude. If some experience – say, a discussion immediately before the test with the top student in the class wherein that student expresses markedly different beliefs regarding the test material – had caused our well-prepared student to have her beliefs supplanted by doubts, we would expect to see her behave more like her poorly prepared classmate. On Peirce's account, this is so because in a state of belief one sees the believed proposition to be fact, and one will always act a certain way in accordance with that fact. Doubt cannot produce any such purposive behaviour, as there are no underlying facts to base one's actions upon, let alone sufficient reason to develop a habit of behaviour.

For Peirce, the development of habitual behaviours is the logical consequence of adherence to a steadily fixed belief. Because it is logical, in Peirce's view, it is binding: if we have applied reasoning in the acquisition of our beliefs, we should conclude also that those beliefs have a basis in fact and as such are appropriate not merely as guidelines, but as rules for action. Consequently, a change in our experience that alters a previously fixed belief – either replacing it with doubt or with a new, more satisfying belief – will always be accompanied by a change in behaviour. If the student who took herself to be well-prepared was forced to accept otherwise, we would observe the change in behaviour described above. Peirce expects that this will always be the case when we are operating as responsible epistemic agents, as action is always predicated on belief, either in light of it or as a result of its lack, as when one acts out of doubt to attain a state of belief. Unsuccessful actions based on ill-conceived or erroneous beliefs are the vehicle for

realizing change within one's belief set, as one comes to realize that such beliefs are unhelpful; and they are unhelpful for the most obvious reason: they are not true.

2.5 Belief & Truth

In her influential analysis of Peirce on truth, Cheryl Misak argues convincingly that Peirce held truth to be both an essentially pragmatic business and the ultimate aim of inquiry. As she says, "Peirce's construal of truth is not an analytic definition of truth, but a distinctly pragmatic elucidation...It is an account of the relationship between truth and inquiry."¹⁰⁰ The discussion above serves to support this point – doubt incites inquiry and inquiry is the best road to true beliefs – but further remarks are necessary here.

Misak describes Peirce's account of truth in relation to inquiry as having the form of a conditional. This conditional has the form "*if*, if inquiry relevant to [a proposition] were to be pursued as far as it could fruitfully go, then [the proposition] would be believed, *then* [the proposition] is true."¹⁰¹ But this is problematic, as we might well think that any method whereby beliefs can be fixed permanently would do, and we can readily imagine such methods that would fix beliefs in no way corresponding to truths.¹⁰² But these sorts of objections implode quickly when we recall Peirce's adamant requirement that we ought to reflect to rightly inquire, which means that inquiry is a process that can proceed only in good faith. When that requirement is met, the sorts of objections that can be made to Peirce's account of truth clearly fail to meet the methodological standard of inquiry. Peirce has already argued quite forcefully that no method save inquiry can be expected to produce true beliefs, and so the connection between scientific investigation and the production of true beliefs stands up quite well to

¹⁰⁰ *Truth and the End of Inquiry*, 4.

¹⁰¹ *Truth and the End of Inquiry*, 46.

¹⁰² For instance, Misak cites Harry Frankfurt's suggestion of taking a pill that would "freeze" our belief set.

the objection that any method of fixing belief permanently could fulfill Peirce's truth requirements. As Misak elucidates, "When we have beliefs that would forever withstand the tests of experience and argument, what is the point of refusing to confer upon them the title 'true'? The pragmatist says there is no point at all."¹⁰³ This captures Peirce's position precisely, as what he has to say on this matter is that anyone with enough experience, applying the laws of logic correctly, "will be led to the one true conclusion."¹⁰⁴

Though we might like to imagine that the quest for certainty occurring in the process of inquiry is always a quest for truth, Peirce is quick to rebuke us on this point: the goal of inquiry is not – or at least, not always – the achievement of true opinion. Truth is the aim only of *ideal* inquiry; falsely motivated or less than scrupulous inquiry might profess to aim at the truth, but aims merely at attaining or protecting one's favoured belief. After all, Peirce is adamant that "the sole object of inquiry is the settlement of opinion."¹⁰⁵ Thus, Peirce acknowledges that we do not always act as ideal inquirers; indeed, sometimes we are merely survivors and our belief formation processes follow one of the other three methods described rather than inquiry. Furthermore, Peirce does not seem to think that we should be judged harshly for acquiring belief by means other than inquiry, *unless* our aim is to discover truths. Functionally, Peirce cheerfully concedes that we do have beliefs that do not aim at the truth; nonetheless, ideally as inquirers we should strive towards the acquisition only of beliefs that are true.

¹⁰³ *Truth and the End of Inquiry*, 47.

¹⁰⁴ W3:254.

¹⁰⁵ W3:248.

3. Contradictions & Conundrums

A newcomer to Peircean territory would be well advised to take note of the following point: Peirce's thought is evolutionary; perhaps even radically so.¹⁰⁶ French Peirce biographer Gérard Deledalle remarks that "his writings must be studied chronologically if they are not to appear incomprehensible or contradictory."¹⁰⁷ This is particularly true when one is trying to forge connections between works from the latter part of Peirce's life and the relatively unified middle phase, as late in life Peirce takes on topics that had been largely neglected in the development of his logic and metaphysics.¹⁰⁸ While this may not quiet all critics who claim that entering the Peircean architectonic is like traipsing into a philosophical bog, it is revelatory when one considers the fairly regular occurrence of apparent contradictions. Generally speaking, these contradictions are not symptomatic of any deep disunity within the body of Peirce's work, but rather, mark the natural development of a system that was under constant revision for nearly fifty years.

Even though understanding this evolutionary character is certainly a key to reading Peirce accurately, it cannot be expected to excuse all instances of apparent contradiction. With the relatively recent publication of the 1898 Cambridge Conference lecture series and the 1903 Harvard Lectures¹⁰⁹, it has come to light that statements

¹⁰⁶ This is true in two senses: firstly, Peirce's thought is evolutionary in the sense that it is contemporaneous with and heavily influenced by Darwinian theory. Secondly, and as I mean it in this context, Peirce's thought is evolutionary in the sense that it progresses over time in much the same way that biological evolution does, with periods of constancy punctuated by episodes of change. Consider that Peirce made the journey from nominalism to realism, and from Kant to Aristotle to Duns Scotus to his own triadic logic. Such transitions are not minor revisions, but serious attempts to reframe his own philosophy in the quest for a logical system.

¹⁰⁷ Deledalle, *Charles S. Peirce: An Intellectual Biography*, p.xxxi.

¹⁰⁸ An example of such a case is his 1908 "Neglected Argument for the Existence of God", published in the *Hibbert Journal*.

¹⁰⁹ The Cambridge lectures were published in 1992, the Harvard lectures in 1997.

regarding belief occur within Peirce's later epistemology which may be contrary to the seemingly complete account just presented. What is at stake here is the legitimacy of my earlier claim that Peirce's account of belief represents a continuous cornerstone in his epistemology. In order to defend that claim, it will be necessary to demonstrate that the remarks made by Peirce during his late lectures series do not actually mark a schism in his epistemological thought and can be satisfactorily reconciled with his earlier account.

3.1 The 1898 Cambridge Conference Lectures

The lectures Peirce gave at Cambridge in the winter of 1898 were significant to him for at least two reasons. At the time, the most prominent of these would have been the remuneration for their presentation, as the cost of maintaining both his estate in Milford, Pennsylvania, and care for his wife in New York had rendered Peirce financially destitute.¹¹⁰ The other reason explicitly expressed by Peirce in his correspondence with William James was that it allowed Peirce an opportunity to make his work known to the academic community – that elite section of society which he was born into¹¹¹, but systematically denied access to in his own career. Though there is considerable evidence that James had more topical influence on the series than Peirce would have liked, it can be discerned from numerous remarks from Peirce on topics closer to James' heart than to his own that Peirce – while keeping more or less to the guidelines James had urged upon him – managed to keep his lectures very much an expression of his own views.¹¹²

¹¹⁰ In a letter to James on January 15th, 1898, Peirce wrote “to touch upon the delicate question of money...my wife asking me to do so for strong reasons.” *RLT*, Introduction:29.

¹¹¹ Peirce's paternal grandfather, Benjamin Peirce, was Librarian of Harvard for five years; his father, Benjamin Peirce, Jr., was a “towering figure” on the Harvard campus and one of the most respected mathematicians of his day. (*RLT*, Introduction:3)

¹¹² An example of Peirce disparaging a topic dear to James' heart is his treatment of James' so-called vital matters, which he dismisses as simply not the occupation of the philosopher. In philosophy, Peirce claimed, the person who doesn't stand aloof from the urgency of finding what is utile for everyday affairs

Amongst the topics discussed in some detail we find Peirce's epistemology, and specifically, his account of belief. It is to the latter than I now turn, wherein we find some worrisome developments.

The first lecture in the Cambridge series, given by Peirce on February 10, is titled "Philosophy and the Conduct of Life," but any listener who came expecting to hear how the former guides the latter was doomed to disappointment. Peirce is quick to distance himself from the view that unites the study of dialectic and virtuous living, which he traces back to Plato.¹¹³ In fact, much of the business of this first lecture is to separate philosophy from the processes of moving around in the world: "in this respect", Peirce says, "I stand before you an Aristotelian and a scientific man, condemning with the whole strength of conviction the Hellenistic tendency to mingle Philosophy and Practice."¹¹⁴ It is the tendency to mingle philosophy and practice – inherited from Plato - that Peirce feels is responsible for contemporary errors in philosophy. Though he acknowledges that the instincts that lead us to engage in moral theorizing are more important to everyday life than a true "love of science", Peirce is adamant that the methods that guide us through our daily life are "radically unfitting for scientific investigation."¹¹⁵ This thesis clearly harkens back to his discussion of the methods of belief fixation, where we are told that the methods acceptable for most daily matters are completely unsuited to the pursuit of truth, which can be successfully embarked upon only via inquiry.

The problem that stems from the comparison between that early account and this new emphasis on the separation between science and daily life is that the former seems to

"will not only obstruct the advance of the pure science, but what is infinitely worse, he will endanger his own moral integrity and that of his readers." *RLT*, 1:107.

¹¹³ *RLT*, 1:106.

¹¹⁴ *RLT*, 1:107.

¹¹⁵ *RLT*, 1:107.

depict an analysis leading to the primacy of scientific inquiry as a method of belief formation ideally appropriate in *all* possible applications, while the latter seems to describe two completely different types of belief, each best arrived at via a particular method. On this interpretation, reasoning is appropriate in matters of science, where impartiality is necessary to make any real progress; but instinct is what does – and ought – guide us through the business of daily life. In science, right reason rules and right sentiment knows it – if we try theses in science on the basis of instinct, “we hold ourselves ready to throw them overboard at a moment’s notice from experience.”¹¹⁶ But reason also dictates allowing supremacy of sentiment in daily human affairs. This leads to an apparent contradiction: in “The Fixation of Belief”, we are strictly abjured to act as inquirers insofar as we are capable, applying reason as widely as possible; in “Philosophy and the Conduct of Life”, we are being told that reason is applicable only in the very limited arena of pure science. So how are we to fix belief: through the application of reason as much as possible, or by instinct the vast majority of the time?

Peirce has an answer for this, though it might not be what one would expect: “I hold that what is properly and usually called *belief*, that is, the adoption of a proposition as...a possession for all time...has no place in science at all.”¹¹⁷ As such, it appears that what is fixed by scientific inquiry of the sort detailed in Peirce’s early epistemology is not belief at all. This apparently marks a major schism between that early epistemology and the view Peirce is presenting in the Cambridge lectures. We have already seen that Peirce’s early account of belief not only appears internally consistent, but also has explanatory value in connection with other major epistemological notions, such as truth.

¹¹⁶ *RLT*, 1:112.

¹¹⁷ *RLT*, 1:112.

What, then, could have prompted Peirce to later embrace an apparently contrary conception of belief?

The simplest possible answer is that in the twenty years elapsed between the works under examination, Peirce radically changed his views; however, even a brief survey supports the existence of strands of continuity in the evolution of Peirce's epistemology. For instance, his comments on scientific inquiry and the nature of philosophy as a science are highly complementary, so long as one is not trying to reconcile the beliefs formed by scientific inquiry as described in "The Fixation of Belief" with the so-called "no belief in science" thesis advanced here. Still, we cannot avoid the fact that there is something odd happening here: Peirce has made a transition from talking of beliefs formed by scientific inquiry to declaring that there is "no proposition at all in science which answers to the conception of belief."¹¹⁸ What now needs to be discerned is whether these remarks are unfortunate one-offs that are best ignored as mere by-products of the discussion of the classification of the sciences detailed in "Philosophy and the Conduct of Life", or whether they mark an intentional addendum to Peirce's original theory of belief.

Given that their subject matter includes logic and reasoning, which Peirce considers the foundation of science, the most obvious place to check for further mention of the "no belief in science" thesis is in the rest of the Cambridge lectures, and in fact, the theme of the role of belief in science does reappear – most prominently, in Peirce's fourth lecture, "The First Rule of Logic." That first rule is Peirce's celebrated injunction to philosophers: "Do not block the way of inquiry."¹¹⁹ What is less well known is that

¹¹⁸ *RLT*, 1:112.

¹¹⁹ *RLT*, 4:178.

Peirce arrives at his first rule by addressing the nature of scientific investigation as it compares to practice.

He begins “The First Rule of Logic” with a reminder about the fallibility of inferential processes, which applies to all sorts of inquiry, though inference is nonetheless self-correcting over time. Peirce claims that induction and deduction are actually quite similar – it is the knowledge of uniformity that makes it possible to limit deductive inquiries to a single “experiment”¹²⁰, while inductive inquiries call for multiple experiments.¹²¹ By contrast, retroductive inquiries, as an example of which Peirce cites the developing theory of evolution, are “theatres of controversy” which involve both “experimental research” and eventual “surrender to the Insistence of an Idea” which is “irresistible and imperative.”¹²² In all cases, what makes science a genuine pursuit of knowledge is “a hearty and active desire to learn what is true” – an attitude that Peirce labels “The Will to Learn.”¹²³ Correct application of the will to learn requires the admission that we do not know something; that we wish to know it; and that we make a genuine effort to find out about it.¹²⁴ Nevertheless, Peirce maintains that the application of this will in science still does not allow for belief in science, remarking that “retroductive [i.e. experimental] inference is not a matter for belief at all.”¹²⁵

In harkening back to the thesis he advances in lecture one of the Cambridge series, Peirce acknowledges that it seems to generate a problem: “When I say that a

¹²⁰ The sort of experiment that Peirce describes as part of the process of deductive reasoning is not empirical, but more in the mode of a thought experiment.

¹²¹ *RLT*, 4:169.

¹²² *RLT*, 4:169-170.

¹²³ *RLT*, 4:170. This is clearly a jab at William James, who had recently published “The Will to Believe”, which he dedicated to Peirce and which begins a sustained history of James misinterpreting Peircean doctrines while simultaneously pledging intellectual allegiance to Peirce.

¹²⁴ *RLT*, 4:172.

¹²⁵ *RLT*, 4:176.

retroductive inference is not a matter for belief at all, I encounter the difficulty that there are certain inferences which scientifically considered are undoubtedly hypotheses and yet which practically are perfectly certain.”¹²⁶ In more basic terms, science sometimes produces hypotheses so well-supported as to seem facts themselves, with respect to which a state of belief seems not only reasonable, but advisable. Peirce acknowledges that such hypotheses can function as facts in practice, but maintains that this does not undermine his thesis that in a scientific context, no fact or complex of facts can be considered “solid ground.” Science never stands “upon the bedrock of fact”, but walks “upon a bog, and can only say, this ground seems to hold for the present.”¹²⁷ Because of the essentially disinterested attitude required for scientific investigation, one can never assert that a proposition is a fact, but may at most adhere to it as if it were. Thus, Peirce says, science “take an entirely different attitude toward facts from that which Practice takes.”¹²⁸ And the fact that science itself can produce what Peirce terms “extra-scientific” certainty - while vitally important to practice - does not change the mandate, process, or position of science with respect to belief. Belief is still “no concern of science which has nothing at stake on any temporal venture, but is in pursuit of eternal verities.”¹²⁹ Rather, the kind of practical “holding for true” that can properly be called belief belongs only to practice, while science proceeds also by holding certain propositions as true, but only ever in a strictly provisional sense.¹³⁰

The additional comments on belief and science provided in “The First Rule of Reason” serve both to illuminate the comments made in “Philosophy and the Conduct of

¹²⁶ *RLT*, 4:176.

¹²⁷ *RLT*, 4:176-177.

¹²⁸ *RLT*, 4:177.

¹²⁹ *RLT*, 4:177.

¹³⁰ *RLT*, 4:178.

Life” and to support the thesis that the view expressed therein is neither accidental nor casually held. At a minimum, it can be concluded that for at least the purposes and duration of the Cambridge Conference lectures, Peirce is committed to the view that belief has no place in pure science, including philosophy.

3.2 The 1903 Harvard Lectures

Further investigation reveals that the Cambridge lectures are not the only forum wherein Peirce advances a firm divide between philosophy and practice, with belief being the sole province of the latter. Clarification on Peirce’s view on the role of belief in science is presented in his second major lecture series, given at Harvard in 1903. Like the Cambridge series, the Harvard lectures had significance to Peirce, and again for two reasons. It is lamentable that one of these was once more their pecuniary value, as Peirce yet again found himself in serious financial straits. He had hoped to secure funding from the newly formed Carnegie Institution, which he applied for on the basis of a proposal to write “memoirs” presenting his logic in its entirety.¹³¹ Assessment of Peirce’s proposal was initially deferred¹³², and later denied, as the Institution ultimately decided to provide funding exclusively to work in the natural sciences, to which it evidently did not consider logic relevant.¹³³ For Peirce scholars, the other reason is considerably more interesting and makes the Harvard lectures a candidate for close study, as it is here that Peirce firmly and clearly separates his own pragmatism from the doctrines championed under that label by others¹³⁴, and gives it what is arguably its most systematic presentation. In the course

¹³¹ *PPM*, Introduction:1.

¹³² In November of 1902. Peirce accurately took this to be a denial of his request for funding. *PPM*, Introduction:3.

¹³³ *PPM*, 5.

¹³⁴ Most significantly in this case, William James.

of the lectures, Peirce argues for the need of a logical basis for pragmatism, as well as entertaining a wide variety of topics to which it applies – including belief.

Peirce touches on belief in his introductory lecture, which he presents as a *prolegomena* to the remainder of the series. In this first lecture, titled simply “Introduction”, Peirce proposes to refine the doctrine of pragmatism that he first advanced in 1878 in the *Popular Science* series. He cites it as an advantage to be “well imbued with pragmatism in the conduct of life” – so we may deduce that the conduct of life is of interest to Peirce, and that it has significance beyond being merely that which is not science.¹³⁵ However, he does emphasize the importance of understanding that pragmatism has a logical basis, remarking that “In order to be admitted to better philosophical standing I have endeavoured to put pragmatism as I understand it into the... form of a philosophical theorem.”¹³⁶ For our purposes here, the main interest is how that theorem is applied to the concept of belief. Peirce’s pragmatic maxim, in a distilled form, says the following: any professed theoretical judgment has as its actual meaning not that the judgment is true in some Platonic sense, but that if it is taken to be true, then a certain practical maxim must follow.¹³⁷ Belief, Peirce states, is a type of judgment that takes the form of assertion to oneself; so, like a verbal assertion, the meaning or “content” of a belief is revealed (and exhausted) by its practical consequences.¹³⁸ What Peirce concludes with respect to belief is an obvious echo of his early formulations of the relationship between belief and action: “There can, of course, be

¹³⁵ *PPM*, 1:109.

¹³⁶ *PPM*, 1:110.

¹³⁷ In Peirce’s own words: “Pragmatism is the principle that every theoretical judgment expressible in a sentence in the indicative mood is a confused form of thought whose only meaning, if it has any, lies in its tendency to enforce a corresponding practical maxim expressible as a conditional sentence with its apodosis in the imperative mood.” *PPM*, 1:110.

¹³⁸ *PPM*, 1:116-117.

no question that a man will act in accordance with his belief so far as his belief has any practical consequences.”¹³⁹ Again, “what we think is to be interpreted in terms of what we are prepared to do.”¹⁴⁰ Given his interest in presenting a coherent and systematic view of his philosophy as seen in the lights of pragmatism, it should be no surprise to us that Peirce considers the notion of belief – so integral to inquiry, knowledge, and action – as worthy of attention at numerous junctures in this mature presentation of his philosophy.

Indeed, in addition to offering these comments on the nature of belief itself, Peirce revisits his account of belief formation practices, expounds upon the role of belief in science, and discusses the relationship between the two. In the introductory lecture we are reminded that Peirce’s classification of the sciences presents mathematics and logic as the purest of sciences – those concerned not with action or everyday applicability. As editor Patricia Ann Turisi puts it, Peirce frames pragmatism “as a scientific doctrine” belonging “to the science of logic.”¹⁴¹ In the practice of philosophy then, “the true scientific investigator completely loses sight of the utility of what he is about.”¹⁴² Unlike the conduct of life, science – including philosophy – is essentially divorced from action. Peirce is adamant about this separation, though he softens it by allowing that he does not mean “that Philosophical science should not ultimately influence Religion and Morality”, but merely that they “should be allowed to do so only with secular slowness and the most conservative caution.”¹⁴³ The point here is quite clear: what is perfectly acceptable and worthy of inquiry and experimental assertion as a scientific hypothesis must spend some

¹³⁹ *PPM*, 1:117.

¹⁴⁰ *PPM*, 1:118.

¹⁴¹ *PPM*, Commentary:31.

¹⁴² *PPM*, 1:107.

¹⁴³ *PPM*, 1:108.

time in practical purgatory before being adopted into to the class of genuine, action-affecting belief. Furthermore, in practical affairs – what Peirce here and elsewhere refers to as matters of vital importance¹⁴⁴ – nonscientific methods of attaining belief are perfectly acceptable.¹⁴⁵ In fact, Peirce is once again poised to argue that they are the only methods suitable for everyday practice, which unfolds in decidedly unscientific ways.

After detailing his plans for the remainder of the series in “Introduction”, Peirce takes up the topic of belief and science in earnest in the second lecture, titled “Phenomenology *or* The Doctrine of the Categories.” In this discussion of the origination of his ontological categories, we find that Peirce offers wholehearted approval for Ockham’s razor, which abjures us to try always simpler hypotheses before more complex ones. He remarks that “There never was a sounder logical maxim of scientific procedure than Ockham’s razor.”¹⁴⁶ Though this is significant praise from Peirce, who prized logical thinking most highly, he is quick to add a proviso: his approval of Ockham’s principle of parsimony is limited to its efficacy as a scientific procedure. Its usefulness is exhausted by science. By contrast, in everyday affairs, “If the question be what one ought to believe, the logic of the situation must take other factors into account.”¹⁴⁷ Peirce does not say what these other factors are, but he is intent on marking any situation where one is discerning “what one ought to believe” as being as far away as possible from the realm of science. He presents the following rationale: “Strictly speaking, Belief is out of place in pure theoretical science”; so compared with “living

¹⁴⁴ Though Peirce’s use of this phrase was at first somewhat satirical (at James’ expense), it appears to have become a useful label for him, as its adoption for the purpose of the Cambridge lectures marked the beginning of a sustained use of the term.

¹⁴⁵ We are guilty, Peirce says, of seriously overestimating the power of our abilities in applied logic (i.e. reasoning). *PPM*, 1:110.

¹⁴⁶ *PPM*, 2:162.

¹⁴⁷ *PPM*, 2:162.

Belief”, what we find in science is “nothing but a ghost.”¹⁴⁸ Peirce anticipates the likelihood that his audience at Harvard would succumb to the temptation to make philosophy the exception, and precludes any line of reasoning headed in that direction by immediately adding that philosophy “is a positive theoretical science”, which has “no more to do with belief than any other science.”¹⁴⁹

While these remarks surely would have perturbed ethicists, they are consistent with Peirce’s convictions regarding the foundational character of mathematics and logic. More importantly for our purposes, they are supremely consistent with the remarks regarding the role of belief in science that Peirce made in the Cambridge lectures five years earlier, which should lead us to the following conclusion: the Cambridge comments - whatever importance we might attach to them in an overall survey of Peirce’s epistemology - are not anomalous. Given his repeated insistence on the importance of separating the science of philosophy from the conduct of everyday affairs and the repetition of the “no belief in science” thesis, it seems that what we have encountered is a new current in Peirce’s thought, or at least one whose importance emerges more clearly in the maturation of his philosophy. Having established that Peirce not only said what he said about belief and science, but said it repeatedly and with some emphasis, we are still faced by the question of how to reconcile this new current with his previous – and relatively complete – account of belief.

¹⁴⁸ *PPM*, 2:162.

¹⁴⁹ *PPM*, 2:162.

3.3 The Science-Other Distinction & The Double Aspect Question

The difficulty faced by the would-be Peircean¹⁵⁰ as a result of the contradictory remarks introduced above is the following: Peirce has presented us not just with a variegated account of belief, but with one that appears not to be practicable. We are told both that scientific inquiry is the best way to fix belief, and that belief has no place in science. This is clearly contradictory, and the result of trying to apply this account to one's practices as an epistemic agent would undoubtedly lead to conflict, if such a view a view could be coherently applied at all. The question we face now is whether Peirce is making an intentional and purposive distinction between science and inquiring, including philosophy on the one hand; and other practices that properly involve attaining belief on the other. What is at issue is whether the emergent science-other distinction Peirce advances in both of his later lecture series can be reconciled with his earlier epistemology, which described belief fixation across a spectrum, rather than as being of two kinds – practical and provisional.

In the contemporary literature on Peirce's view of belief, there are two prominent positions on what to do about this difficulty, each espousing different tactics for dealing with the apparent inconsistencies in the story Peirce tells.¹⁵¹ The first is what I will call the "parsimonious Peircean position", which seeks to make Peirce intelligible via vigorous – but nonetheless, highly conscientious – editing. Those who reject this revisionist strategy adopt what I will call the "conservative Peircean position", which

¹⁵⁰ What I mean by this term is one who finds Peirce's doctrines appealing and would like to adhere to them. One might say that an orthodox Peircean is one who attempts to adhere to the package, while most contemporary philosophers would likely adopt certain doctrines and reject others. The question of which doctrines are *essential* to count oneself a Peircean or a pragmatist is, of course, a matter for considerable debate.

¹⁵¹ These are, of course, tactics adopted by those who wish to take something away from Peirce on the topic of belief. Those who scorn pragmatism resolve the problem of Peirce's apparent inconsistencies primarily by ignoring him altogether.

attempts to retain as much of the original Peircean material as possible and reconcile its disparities by way of attributing a highly complex theory to Peirce, one that casts believing as synonymous with “holding for true”, and the concept of belief itself as having a dual nature. Scholars who assume the former position assure us that Peirce has a unitary theory of belief, confused by the occasional simply wacky statement, while those upholding the latter position reconcile Peirce’s early and late epistemological views by attributing to him a theory that presupposes some kind of duality within the concept of belief itself. The question, then, is this: does the double aspect interpretation of Peirce’s conception of belief best resolve the apparent inconsistencies within his writings?

Let us consider our candidates: the parsimonious Peircean position, represented by Cheryl Misak, which answers the double aspect question in the negative; and the conservative Peircean position, represented by Mark Migotti, which answers that same question in the positive. This dispute is about more than a simple choice between preservation and parsimony, as Peirce’s ideas about belief are absolutely central to his system. With this in mind, let us turn to an assessment of the two positions under consideration.

4. The Parsimonious Peircean Position

The intellectual hallmark of this position is a commitment to reading Peirce on belief in an editorial fashion, as the contradictions so far discussed are taken to be the result of inconsistency or carelessness on Peirce's part, which produces a view best ignored. Still, the essential elements of Peirce's epistemology are taken to be a promising beginning, from which an account of belief that is both plausible and substantively Peircean can be constructed. Thus, the optimal version of Peirce's theory of belief is to be arrived at via excision of certain troublesome remarks which are in no way central, and in any case not conclusively damning, to Peirce's account of belief or the larger picture of his epistemology. This position has a number of advocates. The revisionist attitude characteristic of the parsimonious position with respect to Peirce's thought on belief originated at least as early as Harry Frankfurt's 1958 article "Peirce's Account of Inquiry", where Frankfurt argues that Peirce's account of inquiry – wherein belief plays such a large role – is "confused and mistaken."¹⁵² A similar position is adopted by Christopher Hookway in his 1993 article "Belief, Confidence and the Method of Science", where Hookway suggests that Peirce's "no belief in science" thesis "was a temporary lapse from philosophical good sense."¹⁵³ However, as it is the most recent contemporary presentation of the issues that motivate a revisionist attitude towards Peirce's work on belief, as well as one that meets an exemplary standard of the principles of clarity and charity, I will restrict my discussion here to the version of the parsimonious position advanced by Cheryl Misak in her 2002 article "C.S. Peirce on Vital Matters."¹⁵⁴

¹⁵² *PAI*, 588.

¹⁵³ *BCM*, 3.

¹⁵⁴ This article first appeared in *Cognitio: Revista de Filosofia*; Vol.3, pp.64-82. It has since been reprinted in 2004's The Cambridge Companion to Peirce, edited by Misak.

4.1 Method

Misak's purpose in "C.S. Peirce on Vital Matters" is to resolve what she views as an unproductive tension within Peirce's later philosophy, that between science and vital matters. Her motivation in dissolving this tension, which she views as a product of Peirce's "no belief in science" thesis, is to demonstrate that Peirce's epistemology and his ethics – often disparaged – are actually continuous. By showing that this continuity exists, Misak aims to show that Peirce's pragmatism can support the moral cognitivism she champions. As such, Misak is coming at the double aspect question regarding Peirce's theory of belief indirectly, through the lens of assessing his philosophy as a suitable foundation for moral cognitivism. She ultimately rejects Peirce's apparent advancement of a dualistic theory of belief in favour of a unitary theory that she holds to be Peircean¹⁵⁵, pragmatist, and practicable.

Misak begins her investigation of Peirce's take on vital matters by reminding us of his views on the concept of belief itself, particularly as it relates to truth. Peirce's conception of a true belief, she declares, is "a belief which would forever meet the challenges of reasons, argument, and evidence."¹⁵⁶ This view, she feels, is "very friendly to cognitivism about morals"¹⁵⁷ – in other words, she thinks that it is arguable that Peirce thought that moral matters are as suitable a forum for inquiry as scientific realms, and that in determining moral matters we are responsive to reasons, argument, and evidence. However, making this argument requires countering the view that Peirce has "only

¹⁵⁵ Here I am using the term "Peircean" in much the same way that Christopher Hookway does, which is as being more or less coextensive with "pragmatist", where pragmatist means in accordance with Peirce's pragmatic maxim. (*BCM*, 27) "Peircean" can also be construed as "what Peirce thinks" or "what Peirce would think", and this is the sense in which I use the term elsewhere.

¹⁵⁶ *PVM*, 150.

¹⁵⁷ *PVM*, 150.

unhelpful things to say” regarding ethics.¹⁵⁸ That view is fuelled, Misak thinks, by Peirce’s distinction between science and vital matters. Peirce appears to hold that the former proceeds stoically in pursuit of the truth and is above the business of belief, while the latter is concerned with answers and action and needs belief as quickly as possible. Still, Misak thinks that Peirce’s philosophy – in particular, his epistemology – can be made to support the view that despite its vital character, ethics, like science, is concerned with truth. But making this step requires rejecting Peirce’s sometime thesis that belief has no place in science. In order to demonstrate that this is a legitimate strategy, Misak endeavours to show that “saying that belief is out of place in science is not the best way Peirce could have put his point.”¹⁵⁹ Rather, she suggests that “[w]hat Peirce was getting at when he made these odd remarks is that the scientist must keep his eye on the fallible nature of belief.”¹⁶⁰ Thus, Misak holds that Peirce’s introduction of a “no belief in science” thesis is an unnecessary complication, and proposes that his view can support a unitary concept of belief that operates in both science and ethics, as both constitute inquiry and, as such, aim at truth in their own ways.

Despite the obvious appeal of her strategy¹⁶¹, Misak rightly considers that she must validate the outright rejection of Peirce’s “no belief in science” thesis before attempting to develop a pragmatic cognitivism on the basis of Peirce’s epistemological foundation. She proposes to accomplish the requisite refutation via the following two-pronged argument: firstly, she seeks to demonstrate that there are similarities in Peirce’s attitudes towards science and other forums for inquiry, such as ethics and metaphysics;

¹⁵⁸ *PVM*, 151.

¹⁵⁹ *PVM*, 152.

¹⁶⁰ *PVM*, 152.

¹⁶¹ After all, the revisionist take on Peirce’s theory of belief is unquestionably less complicated, and (at least in Misak’s version) proposes to make intellectual space for a pragmatist ethics with actual currency.

and secondly, she seeks to undermine the relevance and significance of what she takes to be no more than a series of scattered remarks relegating belief to the realm of vital matters and truth to the realm of science.

The first half of Misak's argument against the relevance of Peirce's thesis on science and belief relies on excavating Peircean texts to unearth a strand of continuity between his attitudes toward the various different sciences. Misak argues that the existence of this strand undermines Peirce's oft repeated distinction between science and vital matters, despite his obvious attachment to that division. She allows that "[t]here is no use in denying that the distinction between vital and scientific matters was dear to Peirce", but suggests that the distinction is not a problem for the cognitivist once we understand Peirce's unique use of terms such as "instinct" and "experience", and the role that they play in the scientific business of inquiry.¹⁶²

Instinct, Misak points out, is part of the scientific method insofar as abduction, which Peirce considered nearly synonymous with hazarding an educated guess, furnishes us with the hypotheses that act as the starting place for inquiry through no mechanism other than instinctual inspiration.¹⁶³ Also, and perhaps more compellingly, Misak argues that the sense of certainty which causes us to feel that an inference is correct is based on instinct and reliance on engrained habits of reasoning. Instinct provides us with the regulative assumptions that guide inquiry.¹⁶⁴ So, she concludes, if instinct has a place in science, its defining role in vital matters does not demarcate a conceptual boundary

¹⁶² *PVM*, 159.

¹⁶³ *PVM*, 159. One might be prepared to argue that Misak's description of abduction as providing "the fallible starting points of the scientific method" might cast abduction, and thus instinct, as a *catalyst* for scientific inquiry, rather than a part of it.

¹⁶⁴ *PVM*, 160. Again, it is debatable whether something that guides inquiry is really a *part* of its process.

between what Peirce saw as “pure” sciences, such as mathematics and logic, and “practical” sciences, such as ethics and anthropology.¹⁶⁵

Continuing in the same vein, Misak expounds on Peirce’s view of experience, which is considerably broader than many standard definitions that limit the concept of experience to that which occurs via sensory perception. In Peirce’s terms, for an episode of cognitive stimulation to count as experience, it needs only to have a positive qualitative content.¹⁶⁶ In Misak’s terms, Peirce views experience as “just...whatever prevents someone from believing exactly what he *wants* to believe.”¹⁶⁷ Such experience can be either real (sensory) or ideal (thought-based), and can participate in a wide variety of experimental modes, not merely “pure” scientific experiments. Since this broad view of experience allows that experimentation can be pursued both in the inner, mental world and the outer, physical world, Misak concludes that ethical experimentation is both viable and valid in Peirce’s view of scientific method. Thus, moral hypotheses are candidates for inquiry aiming at truth, for truth-values, and yet nonetheless, for belief.

In tandem with her extrapolation of Peirce’s account of the role of instinct in science, this inclusive view of experience serves to narrow the gap between ethics as a vital matter and ethics as a science. Misak claims that her description of the shared features of ethics and other sciences as all falling within the rubric of the Peircean definition of inquiry reveals a certain Peirce, one that she sees as putting “[e]thics and

¹⁶⁵ This distinction is advanced in “Philosophy and the Conduct of Life.” It is noteworthy here that Peirce did consider ethics to be a science, just not a pure science; nor is his division bivalent: he describes the various sciences on a spectrum, and often expresses hope that we might become more scientific about those sciences that are now operating on the basis of our intense interest and sense of personal investment, such as ethics.

¹⁶⁶ *PVM*, 154.

¹⁶⁷ *PVM*, 155. Strictly speaking, this is not a definition of experience but of *recalcitrant* experience – as it certainly seems that Peirce would allow that there is experience that reinforces either a belief directly in question or the body of background beliefs.

science...in the same boat.”¹⁶⁸ This is the Peirce that Misak wants to draw out, as the position she develops on his behalf supports her own “commitment to keeping philosophy in touch with experience and practice”¹⁶⁹ – despite his many comments to the contrary.

The second half of Misak’s double-barrelled argument against Peirce’s “no belief in science” thesis is meant to obviate the importance of those comments Peirce makes that are contrary to the unitary view of belief and inquiry Misak is describing in her version of his account of science and vital matters. In the larger framework of using Peirce’s pragmatism as a foundation for moral cognitivism, there is no place for what Misak calls a “contentious view of science, in which belief is out of place.”¹⁷⁰

Interestingly, unlike the first part of her argument for the dismissal of Peirce’s “no belief in science” thesis and the distinction between science and vital matters that it engenders, this second step relies on textual analysis in only a very limited way and instead draws mainly on factors external to Peirce’s writings to reject the notion that his remarks on the role of belief in science might be significant.

Although Peirce comments on belief and science extensively in both the Cambridge Conference lectures of 1898 and the Harvard lectures of 1903, Misak chooses to focus on a draft of Peirce’s application for funding to the Carnegie Institution to demonstrate inconsistency in his attitude about the role of belief in science. Based on Peirce’s claims in this draft, Misak argues that what Peirce really thinks is that belief “is not *out of place* in science...just tempered by fallibilism.”¹⁷¹ In addition to the

¹⁶⁸ *PVM*, 162.

¹⁶⁹ *PVM*, 158.

¹⁷⁰ *PVM*, 162.

¹⁷¹ *PVM*, 162.

application to the Carnegie Institution, Misak also cites two of Peirce's unpublished papers, 1898's "Detached Ideas on Vitally Important Topics" and 1902's "Reason's Rules", as places where Peirce emphasizes the fallibility of scientific inquiry, which he compares to walking on a bog, where each step one takes might lead either to the surprise of being supported or the surprise of finding oneself decidedly soggy.¹⁷²

Misak dismisses the Cambridge lectures, where Peirce first makes consistent mention of his developing "no belief in science" view, as she believes that they are "not the best place for discerning Peirce's considered view about science and vital matters."¹⁷³ What leads Misak to this quick dismissal is the fact that during the composition of the lectures, Peirce was irate with William James, under whose auspices Peirce's Cambridge series had been arranged. It is true, as Misak says, that James "had charitably set up the lectures", and from the position of having done so, had put considerable pressure on Peirce regarding their content – specifically, exhorting him to not to deal with logic, which James often said he himself had no head for.¹⁷⁴ These facts are sufficient for Misak to conclude that the remarks Peirce makes on the separation of science and vital matters "simply cannot be taken seriously once it is seen that Peirce was wounded about being told, in such an offensive way, to excise the hard reasoning and logic from his lectures."¹⁷⁵

In addition to the claim that the content and tone of the Cambridge lectures was influenced by Peirce being nastily disposed towards James' suggestion that Peirce write

¹⁷² The science-as-bog metaphor does appear in "Detached Ideas on Vitally Important Topics", but is further developed in the Cambridge lectures, which Misak argues are not to be taken seriously.

¹⁷³ *PVM*, 163.

¹⁷⁴ James was so adamant that Peirce should avoid logic in favour of "topics of a vitally important character" that he exhorted Peirce to "keep the lectures as unmathematical as in you lies." *RLT*, Introduction:25.

¹⁷⁵ *PVM*, 164.

on “vital matters”, Misak also suggests that Peirce “seesaws” about the “no belief in science” thesis within the lectures themselves.¹⁷⁶ Specifically, in the first lecture, “Philosophy and the Conduct of Life”, Misak thinks it is contradictory that Peirce asserts on the one hand that “we are driven oftentimes in science to try the suggestions of instinct, but we only *try* them” and that “[n]othing is vital for science; nothing can be”; and on the other hand that science does produce what it holds as “established truths”, against which new hypotheses are judged.¹⁷⁷ Misak takes it that Peirce thinks the scientist, for all intents and purposes, believes in her established truths – or at least, that Peirce thinks so some of the time. She then calls for a judgment on the basis of efficacy, saying that “[I]f we have to choose, on their merits, which of Peirce’s opposing views of science to accept, the choice is easy.”¹⁷⁸ Peirce simply fails to see that scientists accept their established truths as the backdrop against which experiments occur, and “just makes a mistake here.”¹⁷⁹ Misak concludes that “If we drop Peirce’s contentious thought about science, we can discern a coherent and very sensible position. In both scientific and moral matters, we have cherished beliefs which are nonetheless responsive to experience.”¹⁸⁰ By demonstrating that there are correlations in Peirce’s attitude towards the sciences generally and ethics specifically and rejecting his “no belief in science” thesis, Misak is satisfied that she has shown that Peirce’s pragmatism can support a robust moral cognitivism. Whether or not one wishes to challenge Misak’s attribution of some such theory to Peirce himself, we might well think that she has demonstrated that his philosophy can provide a foundation for one. However, given that the outcome of

¹⁷⁶ *PVM*, 164.

¹⁷⁷ *PVM*, 164; *RLT*, 1:111-112.

¹⁷⁸ *PVM*, 164.

¹⁷⁹ *PVM*, 165.

¹⁸⁰ *PVM*, 165.

such a discussion, while interesting to any contemporary pragmatist – as well as their detractors – is not strictly relevant to the inquiry at hand, let us turn to a more specific analysis of Misak’s treatment of the double aspect question.

4.2 Merits

The chief merit of Misak’s exposition of the problems caused by the “no belief in science” thesis is that it is constructive, seeking not to make light of what she considers unfortunate errors but to correct them in a way that gives the subtleties of Peirce’s work their due. Faced with a thesis that she considers contentious, problematic for the ethicist, and – perhaps most damningly – inconsistently held, Misak nonetheless sets about rescuing Peirce from his own obtuseness with admirable patience and scholarship. In at least some ways, her attempted rescue is successful: her analysis of Peirce’s theory of belief produces something free of contradiction, and hence, practicable.

One of the main reasons to take issue with Peirce’s theory of belief in its original form is that its internal contradictions appear to make it impossible to actually use. How, the prospective Peircean is forced to ask, can I use the scientific method to fix belief when belief plays no role in science? By excising the “no belief in science” thesis from Peirce’s account, Misak eliminates the source of such contradictions. She allows belief back into science, and illuminates its role as the background of scientific investigation, but also upholds the Peircean requirement for awareness of the fallibility of belief in all modes of inquiry, ethics included. She also emphasizes the importance of behaving as an inquirer in as many areas as possible – be it mathematics, metaphysics, or morals. As such, her account is in tune with what is perhaps Peirce’s most famous bit of rhetoric, his

injunction to obey the slogan “Do not block the path of inquiry.”¹⁸¹ Furthermore, the cognitivism that Misak advances is meant to be continuous with Peirce’s epistemology, with which she has no issue once the role of belief in science is clarified to her satisfaction. This suggests that the moral cognitivism advanced by Misak can be practiced by one who is a Peircean in other respects, albeit not an orthodox one.¹⁸²

As to whether the theory of belief that Misak ascribes to Peirce is practicable independent of the theory of ethics that she sees it as serving so well, the answer seems to be that it is at least as applicable as Peirce’s own view, and certainly easier to understand. The concept of belief advanced by Misak is one that is complementary with experience in all its various forms, and in all cases, fallible and revisable on the basis of sufficient recalcitrant experience. She holds that scientific hypothesis is a form of belief like any other, merely one where it is especially important to be mindful of the fallibility of our belief forming processes, no matter how purely motivated the inquiry. This certainly seems more realistic than Peirce’s view of pure science, which casts the scientist in the role of disinterested observer, one who has no belief and no particular care as to how her experiment turns out. It also elevates those who inquire in the area of practical sciences, such as ethics, to the same station as that of the scientist – namely, that of the Peircean inquirer, who will strive to find those beliefs which “will not be overturned by recalcitrant experience and argument” – in other words, those that are true.¹⁸³ There is every reason to think that true beliefs, on the pragmatic meaning of “true”, will tend to guide us satisfactorily through the world insofar as they insulate us from the unpleasant and doubt-producing experiences sure to result from less well-supported views, so insofar

¹⁸¹ *RLT*, 4:178.

¹⁸² I will elucidate shortly the reasons why the orthodox Peircean might reject Misak’s view.

¹⁸³ *PVM*, 150.

as Misak still applies Peirce's pragmatic maxim to the notion of belief, she has a view that helpfully simplifies belief itself and maintains its essential connection to the conduct of life, while making space for it in the realm of pure science.

In the end, Misak is in the business of resolving the issue of the "no belief in science" thesis in Peirce's theory of belief in order to set the scene for advancing a theory of ethics. That theory sets a difficult ideal for the everyday believer to uphold consistently, given its aim at truth rather than preference or relative acceptability, but it is obviously complementary with her commitments to Peircean epistemology and fostering a connection between philosophy and practice. In a truly Peircean spirit, she does not hold that a pragmatist moral cognitivism will furnish us with the absolute facts on the basis of our instinct, but that it will illuminate the necessity for sustained and serious inquiry into moral problems. For any pragmatist interested in doing ethics seriously, Misak's version of Peirce's theory of belief is unquestionably an improvement over the original. The question to ask now is whether we ought to accept it – or whether there are some problems posed by Misak's method of exploration that should cause us to hesitate to accept her revisionist view.

4.3 Problems

While Misak is certainly correct in her assertion that there are "many wrinkles in Peirce's brand of pragmatism" that "need to be worked out", her identification of a strand of conceptual continuity between science and ethics strikes one less as revelation about Peirce's philosophy and more as a recasting of that philosophy in light of certain aims. At several points in "C.S. Peirce on Vital Matters", Misak admits her cognitivist agenda, which appears to be her only motivation for taking up the question of Peirce's "no belief

in science” thesis. The directedness of her investigation leads to a number of questions and concerns regarding its validity: firstly, her discussion seems somewhat arbitrary in terms of the texts selected for analysis; secondly, it does not make any serious attempt to reconcile Peirce’s account of belief internally; and thirdly, it fails to address the significance of Peirce’s intellectual heritage in assessing the distinction drawn between science and vital matters. Taken together, these three issues combine to produce the worry that Misak’s modified version of Peirce’s theory of belief, while clearly pragmatist, may be out of concert with significant Peircean themes.¹⁸⁴

The first issue is the least serious, as it is practically necessarily the case that one must select a cross-section when assessing Peirce’s writings on any topic. He was such a prolific writer that a complete textual exegesis on any topic would require far more space than one is allowed for a journal-length article. Still, there are more and less appropriate choices for investigating a topic within Peirce’s oeuvre, and on the questions of science and vital matters and the role of belief in science, there is at least one seminal text that Misak overlooks – namely, the Harvard lectures of 1903. Even if one accedes to the claim that we cannot take the Cambridge lectures seriously due to Peirce’s mood at the time, there is certainly no similar barrier to accepting the seriousness of the scholarship exhibited by Peirce in the Harvard lectures, despite his relationship with James again being under some stress at the time, as James had once again saved Peirce from a financial drought by arranging a lecture series using his influence and not an inconsiderable amount of his own money. The animosity between the two at that time was directed from James towards Peirce (rather than the reverse as had been the case during the period of the Cambridge series), and as such was highly unlikely to have

¹⁸⁴ Here I use the term “Peircean” in the broader sense.

affected the composition of the Harvard lectures. These lectures comprise a clear and systematic presentation of the main themes and applications of Peirce's pragmatism, and also include exposition on the role of belief in science, deeming it once again to be non-existent.¹⁸⁵ Misak curiously overlooks this explicit statement of the "no belief in science" thesis, despite having sought refutation of it in far less prominent places.¹⁸⁶

I would now further suggest that the importance of the Harvard lectures makes it worthwhile to reconsider the significance of the Cambridge lectures, despite Misak's suggestion that Peirce was unreliable at the time due to his crankiness towards James. While it is certainly true that every Peirce scholar owes a debt to William James, without whom Peirce would have been even less well known by his contemporaries (had he survived at all), the correspondence from the period of the Harvard lectures reveals that they had a relationship that was both a genuine friendship and a genuine source of frustration to them both. Peirce's main motive in choosing the content of the Harvard lectures was to disambiguate his own pragmatism from other doctrines going by that name – most notably James' – and this determined the content of the Harvard lectures in a way that James found most disagreeable. In a letter in the spring of 1903, James complained about Peirce's "unconstrained penchant to declare publicly what he had determined to be philosophically true, no matter whose feathers it might ruffle" – the feathers in question undeniably being his own.¹⁸⁷ The point of highlighting the volatile nature of the relationship shared by the two men is simply to make it clear that it was an

¹⁸⁵ As discussed above in 3.2

¹⁸⁶ In particular, the choice of Peirce's application to the Carnegie Institution seems an odd place to find his considered views; he was, after all, in the business of trying to secure a grant, not disseminate his philosophy in an accurate form, and anyway the application was rejected as well might have been some of the theses therein.

¹⁸⁷ *RLT*, Introduction:12. In fact, James' feathers were so ruffled that in a letter to British pragmatist F.C.S. Schiller in April of 1903, he referred to Peirce as a "hopeless crank."

enduring feature, and as such, would have been unlikely to seriously affect Peirce's ability to do philosophy – which might lead us to think that the theses advanced by Peirce in the Cambridge lectures are, in fact, quite serious. Another reason to think that this is so, specifically with respect to the question of Peirce's "no belief in science" thesis, is that in addition to being echoed in the Harvard presentation, it occurs more than once within the Cambridge lectures – a fact that does not emerge in the course of Misak's discussion due to limiting the discussion of the Cambridge series to merely the first of those lectures, despite the clarity of exposition of the "no belief in science" thesis in "The First Rule of Logic."

Despite the fact that Misak does not discuss Peirce's Harvard lecture series at all, nor the Cambridge series in a sustained way, it seems fair to assume that had she done so, she would still have rejected the notion that the claims regarding the role of belief in science would be vindicated elsewhere in Peirce's writings. This leads to my second concern with Misak's account: given that she finds his expression of a "no belief in science" thesis "contentious", it appears that she is primarily seeking texts supporting its excision, rather than texts supporting its inclusion. This is not to say that Misak's inquiry is arbitrary, but merely that it is *directed* – the desire to render Peirce's theory of belief commensurate with a practicable theory of ethics in the form of moral cognitivism is what drives Misak's investigation into the seemingly dualistic conception of belief that Peirce maintains alongside his division between science and vital matters, and what ultimately causes her to reject his "no belief in science" thesis as a mistake. It should come as no surprise, then, that Misak does not make an attempt to reconcile Peirce's disparate claims about belief internally. This is perhaps a suitably Peircean point: an

inquiry into the nature of his account of belief would be most likely to yield truth if it were, as he puts it, scientifically disinterested. But Misak wants belief to be put into service on behalf of truth in science and vital matters, and has come into the investigation with her own commitment to “keeping philosophy in touch with...practice”¹⁸⁸ – and consequently, does not treat the notion that Peirce’s contradictory comments on belief might be a candidate for internal resolution, rather than outright excision.

Both the choice not to attempt an internal resolution and the underestimation of the significance of Peirce’s seemingly stray comments on the role of belief and science are, I think, a product of the third concern I have identified with Misak’s assessment of Peirce’s theory of belief, which is that it does not fully appreciate the significance of Peirce’s intellectual heritage. That heritage, it seems clear, supports the distinction drawn between science and vital matters and the exclusion of belief from the realm of science – and the place where this point is put most clearly is alongside Peirce’s first mention of the “no belief in science” thesis, in “Philosophy and the Conduct of Life.” Here, Peirce states that the biggest mistake ever made in philosophy was perpetrated by the Ancient Greeks, who “expected philosophy to affect life... forthwith in the person and soul of the philosopher himself.”¹⁸⁹ Peirce calls committing this “error” a Hellenistic tendency, and suggests that the antidote to it was provided by Aristotle, who was a “thorough-paced scientific man” and “set this matter right.”¹⁹⁰ In Peirce’s view, Aristotle set it right by dividing the pursuit of knowledge into theoretical sciences, such as logic; and other branches such as aesthetics and moral theory, which he saw as vastly different – *contra* Plato, who had inherited the Hellenistic error. Peirce then informs his audience at

¹⁸⁸ *PVM*, 158. I will argue shortly that this is a commitment not shared by Peirce.

¹⁸⁹ *RLT*, 1:106.

¹⁹⁰ *RLT*, 1:107.

Cambridge that “in this respect I stand before you an Aristotelian and a scientific man, condemning with the whole strength of conviction the Hellenistic tendency to mingle Philosophy and Practice.”¹⁹¹ This stance makes sense of Peirce’s classification of the sciences, where he consistently puts the descriptive before the normative¹⁹², and also of his repeated insistence that science be separated from vital matters. Peirce sees science and other realms where inquiry can be applied, such as the everyday conduct of life, as *different in kind*. This position is clearly different from the one that Misak wishes to champion under Peirce’s banner. In her account, the gap between science and vital matters is problematic at least partially because of her own commitment to “keeping philosophy in touch with...practice.”¹⁹³ Misak is working under the assumption that the gap between science and vital matters is one that we should wish to close, but for Peirce the opposite is true – the maintenance of that gap is studied, deliberate, and rationally motivated.

Once we remind ourselves that Peirce is a committed Aristotelian – a fact borne out not just by the two lecture series that we have explored so thoroughly here, but also supported by his other attempts at a systematic presentation of his philosophy¹⁹⁴ – his remarks on the role of belief in science, as compared to its place in the conduct of life, begin to fall into place, though there are certainly still contradictions to be resolved. This line of thinking leads one naturally to the following thought: might it not be worthwhile to attempt to reconcile the contradictions caused by Peirce’s “no belief in science” thesis

¹⁹¹ *RLT*, 1:107.

¹⁹² *PPM*, 1:119. Peirce says that normative science “proposes to separate the sheep from the goats”, or the good from the bad, but before that enterprise can be usefully undertaken a science is needed that does not rely on good-bad distinctions, but “contemplates phenomena as they are.”

¹⁹³ *PVM*, 158.

¹⁹⁴ For example, in the introduction to “A Guess at the Riddle”, Peirce boldly states the following: “The undertaking which this volume inaugurates is to make a philosophy like that of Aristotle” – that is, one whose “few deliberately chosen concepts” are “solid, unshakeable, and not easily undermined.” *W6*:167.

by a kind of internal audit? This is a possibility that Misak never seriously entertains, but there is a competitor to her parsimonious position that does. If it can be demonstrated that Peirce's account, rightly interpreted, is internally consistent, then it may well be that the problem is not for Peirce on belief but for the case that Peirce's theory can be made to support moral cognitivism. This would not undermine Misak's eloquent arguments that a pragmatist cognitivism is desirable, but would demand the admission that to base such a theory on Peirce's foundation requires revising Peirce's philosophy to suit a first principle that he would never have endorsed, which is that philosophy and the conduct of life are continuous and hence that philosophy and practice should march in step. However, the business of this project is not to address the uneasy relationship between pragmatism and ethics, but to determine whether Peirce's theory of belief can be understood as consistent in itself and cohesive with his larger epistemology.¹⁹⁵ To see whether this is so, I turn now to the main competitor to the parsimonious Peircean position on Peirce's theory of belief: the conservative Peircean position.

¹⁹⁵ Of course, if it were the case that this was entirely impossible, the parsimonious position would be worth revisiting, preferably from the perspective of assessing Peirce's theory of belief independently of the question of its utility for moral cognitivism.

5. The Conservative Peircean Position

Unlike the parsimonious position, this stance is characterized by the notion that resolving the contradictions found in Peirce's writings on belief relies upon recognizing that they are only apparent contradictions, which can be resolved via close reading and holistic analysis. The conservative position suggests that an inclusive analysis of Peirce's epistemology at different points in the development of his system as a whole reveals an interesting and consistent account wherein what is referred to as believing occurs differently in the cases of science and "vital matters", or everyday life practices. Thus, there is nothing inherently contradictory in Peirce's saying both that belief should aim at truth and that it is acceptable (or even desirable) to fix belief by other methods, nor does his "no belief in science" thesis comprise a flaw in his larger body of work on belief worthy of excision. This position is exemplified by Mark Migotti's analysis in his 2005 article "The Key to Peirce's View of the Role of Belief in Scientific Inquiry."¹⁹⁶ Migotti's analysis is both the most recent I have found on this topic and the most germane, as it responds directly to Misak on the issue of Peirce's problematic theory of belief.

5.1 Method

Unlike Misak, Migotti tackles the double aspect question head on, as a problem in itself that demands resolution. He begins his analysis of the "no belief in science" thesis by citing Peirce's Cambridge lectures as the source of the dilemma at hand, and suggesting that it is possible to resolve the tensions illuminated in Misak's discussion without excising material from Peirce's later writings. Migotti's argument for conserving Peirce's later remarks about the role of belief in science proceeds by two strategies:

¹⁹⁶ This article appears in *Cognitio*, Volume 6, Number 1, pp.43-55.

firstly, he proposes to demonstrate that Peirce can coherently promote “sedulously keeping belief out of the picture” in scientific investigations while still advocating “the merits of the scientific method of fixing belief”; and secondly, he strives to show that careful interpretation solves the “conundrum” of how the scientific mode of inquiry, having no relation to belief, can nonetheless produce it.¹⁹⁷ This demonstration proceeds by close textual analysis of Peirce’s Cambridge lectures as a whole, and operates under the following thesis: “the position Peirce argued for in the spring of 1898 is...in no way anomalous, and moreover, *pace* Misak, true and interesting.”¹⁹⁸

Migotti begins the demonstrative portion of his analysis by disambiguating Peirce’s “no belief in science thesis” from that advanced by Karl Popper. As Migotti puts it, “Popper’s banishment of belief from science follows...from his banishment of the knowing subject from epistemology”, but Peirce’s banishment of belief from science “cannot be thus motivated.”¹⁹⁹ Peirce’s epistemology acknowledges and works within the bounds of subjectivity, which necessitates his emphasis on fallibilism but also makes a habitable space for the subject – who is, after all, the author and adjudicator of belief. “[Peirce’s] doubt-belief theory of inquiry,” Migotti points out, “makes essential reference to...psychological states of knowing, inquiring, subjects.”²⁰⁰ Because of the difference in his attitude towards subjectivity, Peirce’s account of the role of belief in science differs from Popper’s in at least the following way: Peirce is concerned with the motivations of the scientist, whereas Popper – at least some of the time – is concerned with scientific theories, rather than those who practice them. Still, this point is just the beginning of a

¹⁹⁷ *PVRB*, 44.

¹⁹⁸ *PVRB*, 45.

¹⁹⁹ *PVRB*, 44.

²⁰⁰ *PVRB*, 44.

clarification of Peirce's view on belief, which Migotti admits is "a source of vexation to interpreters of his philosophy."²⁰¹

Getting to the heart of Peirce's account of belief requires more than understanding what his theory is not (i.e. Popperian); and Migotti suggests that the apparent contradictions are resolved by seeing that "[w]hat Peirce has recognized...very roughly, is that the role of belief in genuine inquiry and the life of science is radically different from its role in action and practical decision generally and vitally important action and practical decision in particular."²⁰² Here it sounds as if Migotti is in agreement with Misak, and he concedes that she has a point: "the view that science has no truck with belief is, and this would certainly be *let mot juste*, incredible."²⁰³ But Migotti is quick to follow up on this surface point of agreement by questioning Misak's claim that the "established truths" that Peirce allows a place in science amount to background beliefs, and that hence, belief has a demonstrated place in science. Migotti's way of pushing back against Misak's explanation draws attention to a most appropriate source: Peirce's initial elucidation, where he delineates just which concept of belief he means to exclude from science: "what is properly and usually called belief, that is, the adoption of a proposition as a...possession for all time...has no place in science at all."²⁰⁴ Such propositions are vital for the everyday business of life, where effective certainty is required for efficacious action, but what is often called belief in science is not belief in its "proper and usual sense" – rather, it is a kind of opinion. Migotti makes the comparison in the following terms: "the full, living belief of momentous action is contrasted with the

²⁰¹ *PVRB*, 44.

²⁰² *PVRB*, 45.

²⁰³ *PVRB*, 45.

²⁰⁴ *RLT*, 1:112.

provisional, quasi-belief of scientific inquiry, the difference being that between an attitude held provisionally and one ‘adopted for all time’.²⁰⁵

Although Migotti makes the point differently, there are some clear echoes here of Misak’s suggestion that what Peirce’s “no belief in science” thesis really amounts to is a special emphasis on the fallibility of belief in science. Migotti is aware of this possible interpretation, and remarks at this point that it seems “the thesis that full belief has no place in science now appears in danger of having been rescued from patent implausibility at the cost of latent banality.”²⁰⁶ The proposition that those clinging tenaciously to their cherished beliefs make poor inquirers is a simple truism, and unworthy, Migotti suggests, of the repeated emphasis that Peirce gives to the exclusion of belief from science.

Another candidate for the status of truism is the claim that the opinion a scientist holds with regard to established truths is, for all intents and purposes, a belief – but this is where Migotti and Misak part ways. Misak is content to point out that truism and conclude that had he thought about it more carefully, Peirce would have recanted his exclusionist thesis regarding belief in science, as opinions on established truths constitute background beliefs and thus the scientist is also a believer. Migotti accepts this, but seeks to put it into its proper context: while Peirce’s view, he argues, is not incompatible with Misak’s suggestion about the role of background beliefs in science, his theory of belief is really “a thesis about the character of inquiry and the motivation of those committed to engaging in it.” What Peirce is *not* interested in, Migotti states, is “what scientists do or believe *outside their capacity as scientific inquirers*.”²⁰⁷ Thus, the fact that the scientist has beliefs – say, with respect to vital matters – does not tell against Peirce’s thesis that

²⁰⁵ *PVRB*, 46.

²⁰⁶ *PVRB*, 46.

²⁰⁷ *PVRB*, 46.

belief has no place within the practice of science. While it can at times be confusing because of the casualness with which Peirce moves from talk of inquiry to talk of inquirers, when they are separated it appears quite comprehensible that Peirce can hold both that science operates in a vacuum of belief and that scientists rely on belief in many non-scientific contexts. The worry that needs to be put to rest is how the scientist keeps his beliefs from encroaching on scientific territory, as it still appears that the “refusal to pledge eternal fidelity to one’s beliefs” that Peirce sees as requisite for the correct pursuit of the scientific enterprise does not stop them from being his beliefs. As Migotti puts it, “the scientist’s denying these beliefs and conclusions any right of permanent abode in his mental household seems rather to presuppose than to preclude their current residence at that address.”²⁰⁸

A pattern seems to be emerging here of the patient Peircean excavating the sometimes obtuse territory comprising his thought on belief, only to be returned again to the position that Peirce’s rejection of belief in science is either *facile* or implausible. Migotti marks the existence of this pattern, and endeavours to show that the key to getting out of it is to consider the Cambridge lectures more closely. In “The First Rule of Reason”, Peirce states that “*holding for true* is of two kinds; the one is that practical holding for true which alone is entitled to the name of Belief, while the other is that acceptance of a proposition which in the intention of pure science remains always provisional.”²⁰⁹ So even if we grant the point that any sort of “holding for true” is a belief, we can allow Peirce’s distinction between belief in the strictly provisional sense and Belief in the “fully committed” sense. Once we see that there is a conceptual

²⁰⁸ *PVRB*, 47.

²⁰⁹ *RLT*, 4:178.

difference between these two types of holding for true, we should be compelled, Migotti says – *contra* Misak – to “ask why [Peirce] would do this.”²¹⁰ In other words, what is the value of the distinction that Peirce draws in the first of the Cambridge lectures and continues to uphold for the remainder of that series?

The difference between scientific belief and practical belief is not, Migotti argues, that we have rational self-control over the former but not over the latter.²¹¹ Indeed, it seems that rational self-control can be employed to the best of our ability in both scientific and practical contexts. Genuine self-control can be exhibited in various spheres; by contrast, genuine inquiry has its home in pure science, and this is the point that Peirce’s distinction is meant to draw out. If we recall that Peirce’s classification puts philosophy into the category of pure science, understanding the corollary of his first rule of reasoning reveals the significance of the difference between practical and scientific holding for true. The first rule of reason, Migotti reminds us, is “that in order to learn you must desire to learn and in so desiring not be satisfied with what you already incline to think”; its corollary is the celebrated injunction “[d]o not block the way of inquiry.”²¹² In explanation of his position, Peirce further says that adhering to a proposition “in an absolutely definitive manner” - that is, *believing* it - is fine for practical purposes, but “in science amounts simply to not wishing to learn.”²¹³ As Migotti puts the point, “[f]ull practical belief is inimical to science because it ‘blocks the way of inquiry’.”²¹⁴ Once an inquirer’s own fate or well-being is staked on a proposition, he can no longer undertake

²¹⁰ *PVRB*, 47.

²¹¹ *PVRB*, 48. This point is made against Christopher Hookway, who claims that Peirce’s attempted distinction really just boils down to a stern reminder to the scientific inquirer to stay in control of her beliefs.

²¹² *RLT*, 4:178.

²¹³ *RLT*, 4:178.

²¹⁴ *PVRB*, 48.

any genuine inquiry into the truth of that proposition, but believes it with all the force of efficacious practical belief – meaning, in the pragmatic view, that his actions will demonstrate the consequences of belief in that proposition, and that he will suffer or prosper accordingly.

As a further clarification, Migotti points out that Peirce does not mean to simply detail a spectrum of belief-strength, where scientific belief is “weak” and practical belief is “strong”; rather, scientific opinion is equally strong, but remains provisional.²¹⁵ It has the force of full belief, but not its commitment. “What Peirce has recognized,” Migotti says, “is that beliefs or holdings for true can differ in two different ways: there is on the one hand sheer degree of credence...and on the other hand a distinction of kind between the theoretical...[and] the practical manners or modes or contexts of holding for true.”²¹⁶ For example, the established truths that Misak upholds as an example of belief in science are “believed very firmly, yet provisionally.” Migotti suggests that weak scientific belief is found “at the speculative forefront of current research”, in those hypotheses so new as to have relatively little support and hence commensurately little credence.²¹⁷ He goes on to give examples of weak and strong belief in practical affairs as well, reaffirming that strong practical belief is “Peirce’s belief ‘properly and usually so-called’.” Having sketched the various possible combinations of strong and weak commitment with practical and theoretical holding-for-true, Migotti concludes that it is only strong practical

²¹⁵ *PVRB*, 49. Again, this point is *contra* Hookway, who Migotti accuses of glossing over Peirce’s distinction by conflating the property of weakness with that of provisionality.

²¹⁶ *PVRB*, 49.

²¹⁷ *PVRB*, 49.

belief that Peirce excludes from science, and that this thesis is “far from banal”, despite the various ways in which it has been misinterpreted.²¹⁸

In summation, Migotti makes the following admirably clear point in affirming the thrust of Peirce’s theory, which he presents as essentially a double-aspect view: “The point of holding things for true in theoretical contexts is to find things out; the point of holding things for true in practical contexts is to get things done.”²¹⁹ It is because the latter point is true that vital matters are considered vital. Peirce sees such matters as cases where the believer must be prepared to act on the beliefs they take to be true, risking very serious (paradigmatically, fatal) consequences. Science, by contrast, proceeds impersonally, indefinitely, with nothing risked and errors to be avoided or expunged regardless of the effects. In science, Migotti remarks, “there is always a second chance, and a third, a fourth, a fifth and indefinitely many more.”²²⁰ Real life, it hardly needs saying, does not operate that way – and so it appears that Peirce’s distinction between vital matters and science does demarcate two importantly different realms. On Migotti’s reading of Peirce’s theory, our attitudes towards belief and action differ dramatically in each case. This does not preclude the possibility of pursuing truth in vital matters, as Misak fears, though that pursuit can never supplant the common sense goal of getting around in the world so far as practical affairs are concerned; nor does it demand the instantaneous rejection of a scientific hypothesis on the basis of a single item of experiential evidence, as she suggests. These questions, as Migotti frames the issue, lie “outside the scope of the no belief in science thesis as Peirce conceives it.”²²¹ The

²¹⁸ *PVRB*, 50.

²¹⁹ *PVRB*, 51.

²²⁰ *PVRB*, 51.

²²¹ *PVRB*, 53.

impetus for Peirce's dualistic theory of belief, on this account, is based on "[t]he need to distinguish full, practical belief from provisional scientific belief" because "belief of the former kind very thoroughly and insidiously impedes and discourages honest, fruitful investigation."²²² Hence, belief in the context of inquiry is essentially provisional.²²³

In the process of giving an interpretation of Peirce's theory of belief that renders it much less contentious than it appears on the surface, Migotti obtains a solution to the remaining problem of how scientific inquiry can be touted as a method for the fixation of belief. The solution for that apparent conundrum is this: while provisional holding-for-true can never be supplanted by practical holding-for-true within the process of scientific inquiry, that process can nonetheless culminate in a hypothesis so widely accepted in science that *for the purposes of vital matters* it can function as a practical belief. Migotti gives an example of how this can be so, describing "an exemplary Peircean scientist, a chemist...accosted one night by an exemplary psychotic aficionado of Monty Python like humour", who demands of the scientist that he pronounce the atomic number of gold in the periodic table or else be shot.²²⁴ We are meant to see that should the periodic table, as a result of surprising new evidence, be altered such that the atomic number of gold were no longer designated as "79", our exemplary Peircean scientist would throw the old theory overboard and adopt this new system; yet, for the purposes of being accosted by an insane John Cleese impersonator, the same scientist is more than happy to treat that provisional belief as true in what unquestionably constitutes a "vitally important context."²²⁵ Migotti makes an important additional point here as well, in claiming that

²²² *PVRB*, 53.

²²³ *PVRB*, 54. Note that "provisional" is not synonymous with "fallible".

²²⁴ *PVRB*, 53.

²²⁵ *PVRB*, 53.

whatever the mental item is that acts as an established truth about the atomic number of gold in a scientific context, it is precisely the same item that acts as a full-fledged belief in the context of the vital matter of not being shot. So in the end, having clearly distinguished Peirce's two ways of seeing the concept of belief, Migotti reunites them under the thesis that both modes of belief nonetheless operate by the same mechanism. Thus, Migotti ends "The Key to Peirce's View of the Role of Belief in Scientific Inquiry" by recapitulating the position he has argued for all along: what separates Peirce's provisional scientific belief from the robust practical belief employed in vital matters is not a difference of kind, but a difference of attitude.²²⁶

5.2 Merits

Unsurprisingly, saving Peirce from contradiction is a good deal more complicated than dismissing that which complicates; and like Misak, Migotti demonstrates admirable patience and scholarship - though it is applied in quite the opposite direction. The chief merit of Migotti's work in his chosen direction is that it is maximally charitable to Peirce, as it affords the philosopher an opportunity to speak for himself in an inquiry that is guided primarily by the simple desire to get to the bottom of Peirce's sometimes confusing theory of belief. Like Misak, Migotti hopes to make Peirce's theory of belief practicable, but attempts to do so by demonstrating that Peirce is not in need of rescue after all.

Migotti exhibits the principle of charity towards Peirce in a number of ways. The most obvious of these is that he reads Peirce deeply, making a relatively complete analysis of the Cambridge lectures to puzzle out the ramifications of the remarks in "Philosophy and the Conduct of Life" that get the "no belief in science" thesis rolling.

²²⁶ *PVRB*, 54.

Bringing together an analysis of “The First Rule of Reason” along with the more widely known first lecture of the Cambridge series demonstrates that in 1898 there was continuity in Peirce’s thought regarding the role of belief in science, which Migotti explores by drawing out the connections between Peirce’s “no belief in science” thesis and his other theses, such as his position that the will to learn is the prerequisite of genuine inquiry. Migotti also demonstrates charity in one other aspect of his analysis, which is that he shores up the cracks in Peirce’s argument. This is done in two chief ways: firstly, by demonstrating that various other readings of Peirce on this topic have been inadequate interpretations; and secondly, by providing examples of how Peirce’s dual aspect theory of belief is meant to function. Given that there is a paucity of compelling examples in Peirce’s own presentation of the expulsion of belief from science, Migotti’s detailed examples help to demonstrate nicely how the two axes of belief (theoretical-provisional and strong-weak) map onto one another.

The question to ask at this point is whether all this generosity makes Peirce’s theory of belief practicable in its conservative form. Returning for a moment to Migotti’s examples demonstrates that it is: if we keep Peirce’s first rule of reason and its corollary firmly in mind, we see that the strength of our theoretical beliefs (be they weak hypotheses or “established truths”) in no way affects their fallibility, nor does a strong theoretical belief begin to encroach on the realm of practical belief, as the former will never inform action in the same way that the latter must.²²⁷ Since Migotti frames Peirce’s thesis as being primarily about attitude, all we need do to adopt this version of Peirce’s theory is adopt the prescribed attitudes towards belief in its practical and theoretical

²²⁷ *PVRB*, 50. Migotti’s example of a strong theoretical belief is “The atomic number of gold is 79”; while strong practical belief is represented by the theistic example “I believe in one God, the Father Almighty...”.

contexts. By exhibiting Peirce's classification of the two types of holding-for-true in the context of real world examples, Migotti demonstrates that in practice, Peirce's theory of belief can be applied without the bother of what now appear to be merely academic complications. If we accept Migotti's interpretation of Peirce's concept of holding-for-true, it does indeed appear that the "no belief in science" thesis is "both plausible and Peircean."²²⁸

Despite the obvious merits of the conservative position that Migotti argues so eloquently for, one is forced to ask the following question: could it be possible that Migotti has been too generous to Peirce, too vigorous a defender of his view in its complete form? Have his efforts to make Peirce not merely consistent, but palatable, obscured certain off-putting aspects of Peirce's original view? There are some troublesome aspects of Migotti's account that must be considered before it will be possible to adjudicate between the conservative view he champions and the parsimonious position advanced by Misak.

5.3 Problems

It is perhaps not altogether surprising that Migotti and Misak engage with Peirce in some similarly problematic ways – Peirce was, at times, famously obtuse and frankly occasionally seems to invite misinterpretation. Peirce was also an outrageously prolific writer, which leaves even his most earnest analyst with a lot of ground to cover. It should be expected, then, that the first problem with Migotti's discussion – like Misak's – is that it seems somewhat arbitrary in terms of the texts selected for analysis. In Migotti's case, however, this leads into a second, more serious problem: his account, while robustly conservationist, fails to establish sufficient connection with Peirce's early work. This

²²⁸ *PVRB*, 43.

second problem leads to a third, which is that Migotti ultimately arrives at a view of Peirce's theory of belief that is not entirely accurate – though I will argue shortly that this charge is not as serious as it might seem.

As I stated earlier, it is, practically speaking, necessarily the case that one must select a cross-section when assessing Peirce's writings on any topic; however, this does not preclude critiquing the choices made. Migotti's selection of writings makes two omissions: one that is at the very least odd, and one that is problematic. The first of these two omissions is the same one made by Misak, which is the Harvard Lectures of 1903, though neglecting this text seems much stranger from Migotti's position given the fact that the Harvard material contains an explicit recapitulation of the "no belief in science" thesis and further expounds on its meaning. Though Migotti makes his argument convincingly without use of the Harvard series, its inclusion would surely strengthen that argument as well as providing a kind of preemptive response to critics who question the validity of gleaning Peirce's considered views from the Cambridge lectures. The other omission, which seems more serious in the context of Migotti's argument, is the material in Peirce's early writings in epistemology that supports the advancement of a dualistic theory of belief. As he is arguing for the continuity of Peirce's account of belief, as well as its commensurability with other Peircean doctrines, it is peculiar and potentially worrisome that Migotti includes hardly any reference to Peirce's most famous work on epistemology, from the perspective of which arguments against Peirce's later exclusion of belief from science are typically made. Migotti touches only briefly on "The Fixation of Belief" and makes no reference at all to any of Peirce's other prolific early work in epistemology.

This leads to what I consider to be a second, more serious problem for Migotti's exposition of Peirce's view of the role of belief in scientific inquiry, which is that it fails to establish sufficient connections between that view and Peirce's better known epistemology. Peirce discusses belief at considerable length and in some detail in ways that would be most helpful for proponents of the conservative position. This apparent oversight may again be a simple issue of inadequate space within the journal format, as Migotti does make efforts to establish continuity within Peirce's account of science as it pertains to the "no belief in science" thesis, despite having disregarded Peirce's early comments on the nature of belief and given relatively little space to his formulations of the process of belief fixation. However, not connecting Peirce's commentary on the exclusion of belief from science in the Cambridge lectures to the original exposition of his epistemology leaves Migotti open to a somewhat *facile*, but nonetheless possible, refutation. The revisionist Peircean camp that he has taken such pains to counter on various other points might now attempt a refutation that proceeds along the following line of thinking: even if one accepts that Migotti has demonstrated Peirce's 1898 theory of belief to be internally consistent, and perhaps even interesting and applicable, we ought to reject it on the basis that it is not fully commensurable with Peirce's early theory of belief – or perhaps for various other reasons, such as Misak's suggestion that the Cambridge lectures are not a good reflection of Peirce's mature thought, or the notion that even if Peirce's later thought on belief is coherent, the earlier formulation might be preferable.

The problem of potential discontinuity does in fact cause an issue for the acceptability of the conservative Peircean position as Migotti frames it, as it leads naturally to a third and final concern with Migotti's representation. This concern is that it

misinterprets Peirce's view of belief *qua* belief and, as a result, softens the seriousness with which Peirce banished belief from science. The questionable move that Migotti makes with respect to Peirce's definition of belief is to posit that "holding for true" is synonymous with believing, and to suggest that both states are identical mentally²²⁹, which appears not to be the case if we consider Peirce's early analysis of the concept of belief. There, he says that belief has "just three properties": we are aware of it; it appeases the irritation of doubt; and it involves establishing rules for action.²³⁰ The essential point here is that belief is intrinsically tied to action. This makes sense in light of the application of Peirce's pragmatic maxim to the concept of belief, which yields the thesis that believing a proposition is analogous to asserting it to oneself, and that its meaning is expressed entirely by its consequences – specifically, the ways in which it impacts one's habits and one's actions. This means that what Migotti describes as "provisional belief" based upon Peirce's practical holding for true is not belief by Peirce's own standard, nor really by any pragmatic standard. It is not belief by Peirce's standard because the sort of state Migotti describes as theoretical belief lacks the psychological opposition to doubt that Peirce ascribes to a state of belief, as well as the necessary connection to action. It is also not belief by a general pragmatic standard, which demands that the assertion one makes to oneself in the form of a belief have consequences – if there are no consequences, then the belief is meaningless. By contrast, Peirce's scientific holding for true is not meaningless; but it *is* detached, and ought not to be confused with the living, vital, consequential concept that is belief.

²²⁹ *PVRB*, 53. Migotti claims that "the belief that *p* is not a different thing according to whether the manner of doxastic commitment is full and practical or provisional and theoretical."

²³⁰ W3:263.

Despite the worries that I have just described, Migotti's attempted resolution of the double aspect question within Peirce's work on belief satisfies on a number of levels: it underscores the importance of seeing Peirce as a scientist with a theory of science informed by a sophisticated theory of belief, and leads to an understanding of Peirce's "no belief in science" thesis that is much closer to preserving the original version than Misak's revisionist account. I am satisfied that Migotti has shown that Peirce's later epistemology, particularly his position in the Cambridge lectures, is "in no way anomalous, and moreover...interesting."²³¹ However, reservations regarding action and the unity of the mental states behind everyday operative belief and scientific provisional belief lead me to dispute certain aspects of Migotti's conservative Peircean position with respect to belief. While this may sound like a return to the parsimonious position advocated by Misak, such a retreat is not the only possible way to resolve the difficulties I have just cited.

²³¹ *PVRB*, 45.

6. The Revised Conservative Position

While both Misak and Migotti's explorations of Peirce's advancement of a "no belief in science" thesis have their own merits, it seems clear enough that if we are to actually attempt to ascribe one of these positions to Peirce, Migotti's is the better candidate. Misak's account endeavours to make Peirce's theory of belief useful for a specific purpose, at the cost of accurately depicting what Peirce thought about belief as it relates to science.²³² Her account is unquestionably simpler, and remains true to some Peircean themes, such as the emphasis on the fallibility of belief, but is also unquestionably distant from what Peirce actually said and neglects the possibly fruitful results of considering why he said it. This is not to say that Misak's parsimonious account might not be an objectively *better* account of belief for a wide variety of purposes – it may turn out to be more in tune with contemporary intuitions, better suited for everyday use, and superior in its explanatory capacity – but it is still not Peirce's account, which is the subject of our inquiry here.

I have suggested that Migotti's version of Peirce's theory of belief is also not a completely faithful representation of the original, though it comes a good deal closer and would operate much like it despite the conflation that casts scientific hypothesis as a strange breed of belief. I am now prepared to further suggest that a return to Peirce himself will allow us to resolve the minor difficulties within Migotti's version of the Peircean account of belief and emerge with a revised conservative position that maintains Peirce's distinctions and emphasizes the compatibility of those distinctions with the remainder of his epistemology, especially as it relates to belief fixation and the

²³² Misak, of course, could be expected to respond that excising the "no belief in science" thesis *costs* the would-be Peircean nothing, and saves her a considerable headache.

methodology of philosophy. I will now argue that it is possible to revise Migotti's conservative Peircean position in such a way as to give Peirce's later developments their full due while also addressing difficulties regarding the status of the two types of belief at issue and their role in philosophy and the conduct of life. The result, though a revision of contemporary accounts, is – as closely as I have been able manage – a representation of Peirce's original account.

6.1 A Conceptual Critique & A Semantic Solution

What is required, first of all, is clarity regarding Peirce's concept of belief. We must recall that Peirce's classification of the sciences sets those he deigns normative apart, as they rely on value judgments and the dichotomy of "good" and "bad."²³³ Belief, by Peirce's definition, is a form of judgment – it comprises an assertion to the self and is always connected to future actions and the development of habits of action. While it is possible to form a judgment that is not a value judgment – for example, that such-and-so is the case, which might certainly be useful in vital matters concerning the such-and-so in question – even these types of judgment, beliefs about mundane affairs, have a force, an essentiality, completely lacking in scientific hypothesis. Even when our beliefs are not value judgments directly, they have value *to us*, and so our attachment to them cannot be expected to be radically provisional, even though they are in principle revisable. This gives us some insight as to why normative sciences, as Peirce categorizes them (including ethics), are subject to the rule of pure sciences, wherein he includes philosophy. In Peirce's system, it is the job of philosophy to see things as they are, to search for the

²³³ *PPM*, 1:119.

facts, to operate disinterestedly in the business of moving towards the truth²³⁴; it is the job of ethics to get us around in the world to the best effect, and unless we are operating as scientists, our behaviour must be based on whatever we perceive our favoured facts to be. Science, Peirce says, only learns lessons: it does not value facts in themselves and has no attachment to any particular set of them, and thus “takes an entirely different attitude toward facts from that which Practice takes.”²³⁵

In practice, the need for a set of judgments to guide us through our everyday affairs is why one *asserts* beliefs to oneself, saying “it is the case that *p*”; by contrast one merely *posits* hypotheses, saying “let us see what it is like when we operate under the notion that ‘it is the case that *p*’.” It is the strength of assertion that makes belief a commitment, whereas one is never committed to a hypothesis, save in an academic sense, and on a trial basis. This is why “compared with living belief,” what we find in science is “nothing but a ghost.”²³⁶ In attempting to distance scientific hypothesis from the concept of belief, Peirce even goes so far as to state baldly that “hypothesis is not a matter for belief.”²³⁷ Peirce meant for belief and scientific hypothesis to be absolutely distinct, which is completely consistent with his stance as an Aristotelian: science and the conduct of life are definitively not continuous. Thus, Peirce’s distinction between science and vital matters is well represented by his thesis that belief has no place in science, and by his own definition, what we find in science – hypothesis – does not answer to the concept of belief. Belief and scientific hypothesis are perhaps not so different from one another

²³⁴ *PPM*, 1:119. Even though he takes issue with nearly everything else about Hegel’s philosophy, Peirce endorses its starting point, which he sees as phenomenology free of the dichotomy between good and bad.

²³⁵ *RLT*, 4:176.

²³⁶ *PPM*, 2:162.

²³⁷ *RLT*, 4:176.

as belief is from doubt, but they do differ, and their conceptual separation within Peirce's philosophy is consistent with his banishment of belief from science.

One can imagine the possible objection here that, call it what he likes, Peirce's hypothesis really does answer to the concept of belief – but this is precisely the point that I have argued against by demonstrating that hypothesis is not belief *by Peirce's own lights*, and – being essentially divorced from action – cannot answer to the definition of belief. This is why it is necessary to reject Migotti's representation of scientific hypothesis as theoretical belief. According to Peirce, there can be no belief in science at all. One cannot assert provisionally, though one might assert claims of varying strengths; there is no such thing as theoretical assertion. In Migotti's example, where the intrepid chemist responds to the John Cleese impersonator, Migotti claims that a theoretical belief is being used in the context of a vital matter; but having clarified Peirce's concepts, we now see that this is not so. Rather, the chemist had a real, living belief that expressing what the would-be murderer took to be an established truth, a scientific hypothesis so well-supported as to produce what Peirce terms "extra-scientific" certainty²³⁸, would lead to the preservation of his well-being. The successful avoidance of harm on the part of Migotti's scientist does not rely on his *believing* that the atomic number of gold is 79, but on believing *that his assailant would believe so* and hence that this would be the best answer to give. We can easily reconfigure the scenario such that our chemist is now doing ground-breaking research that is leading to the reconfiguration of the periodic table of the elements, and working every day in his lab under the hypothesis that all previously assigned atomic numbers are incorrect. Should he encounter the very same Pythonesque robber, the chemist would likely believe that the thug is unaware of his groundbreaking

²³⁸ *RLT*, 4:177.

new research, and answer with the soon-to-be overthrown established truth that the atomic number of gold is 79 – and the chemist would very likely be correct in judging that his assailant is not up on current developments in the field of chemistry, and get away in precisely the same manner that he did in Migotti’s original example. In both Migotti’s original example and my modified version, the chemist is relying not upon a scientific hypothesis, but on his practical beliefs about the knowledge of chemistry possessed by Pythonesque robbers – and if the scenario were to unfold as I described, a good thing too, as attempting to use a scientific hypothesis newly held to be true in that particular vital matter would likely have led to a grisly end.

Having established that Peirce considers belief and scientific hypothesis to be conceptually distinct, I would now propose that a simple semantic solution would alleviate a great deal of the confusion surrounding interpretations of the “no belief in science” thesis that Peirce advances from 1898 on. Simply put, the committed excavator of Peirce’s texts ought not to refer to hypothesis as belief of any kind in reference to his theory. Scientific hypothesis is not theoretical belief, provisional belief, or proto-belief, and bears only surface similarity to belief proper. The attitude that Migotti rightly points to as being Peirce-prescribed is one of disinterest in science whenever one is functioning as a scientist.²³⁹ Migotti also makes the point that no one is always functioning as a scientist nicely by detailing the probable effects of giving up on a cherished hypothesis, though the ideal Peircean scientist would studiously avoid coming to cherish any particular hypothesis. The scientific attitude, however, would be completely inefficacious in the business of vital matters where, as Peirce says, decisions must be made. Use of clear, unambiguous terminology and an understanding of the different

²³⁹ *PVRB*, 51.

concepts so described will go a long way to resolving the apparent contradictions within Peirce's work.

6.2 Three Arguments

Now that the distinction between Peirce's conception of belief and his notion of scientific hypothesis has been made clear, the following thesis emerges: the seemingly disparate epistemological views presented by Peirce are actually continuous, but the presentation of his account suffers from what might best be described as semantic looseness. This leads to the need to give evidence in favour of the overall coherence of Peirce's theory of belief, of which I contend that there are three compelling arguments: first, Peirce advances a science-other distinction in both his early and later epistemological work; second, the distinction between science and vital matters that Peirce insists upon has a logical basis; and third, Peirce's claims about the role of belief in science, despite being somewhat discordant to the modern mind, make sense in light of his own definition of belief.

With respect to the first argument, in order to demonstrate that Peirce's early and late accounts of belief are commensurable, it is necessary to establish that Peirce does advance a science-other distinction in his early work. Neither Misak nor Migotti explores this area of continuity, but it will prove fruitful to the preservation of Peirce's original theory to do so. The best place to see how Peirce's early work in epistemology foreshadows the distinction he later draws between science and vital matters is in the papers from the "Illustrations of the Logic of Science" series published in 1877-1878. For example, reflecting from the position of his later lectures, it seems likely that Peirce's rationale in "The Fixation of Belief" in claiming that for the mass of humanity, the

methods of tenacity, authority, and rationalism are sufficient – despite his recognition of the fact that they are not truth conducive – was that most of the time, the mass of humanity is not acting philosophically and is happy to operate at some distance from the truth, needing only a certain number of perceived facts upon which to base behaviour. This is why, despite its massive methodological advantages in pursuit of the truth, Peirce does not unequivocally or universally endorse the method of inquiry. Inquiry is best suited to science, while tenacity, authority, and rationalism can never participate in the scientific enterprise, though they can sometimes suffice for the purpose of vital matters.²⁴⁰ The development of the pragmatic maxim and its application to belief as described in “How to Make Our Ideas Clear” is a second point of obvious continuity, as in the Harvard lectures we find Peirce upholding that maxim in its essentials and in its application to the concept of belief, with the minimal proviso that he wishes to distance himself from his earlier version insofar as he finds it to be overly psychologistic. Finally, the most obvious example of foreshadowing that we see brought to fruition in Peirce’s mature theory of belief is found in his early definitions of belief, especially as they occur in “Towards a Logic Book” where Peirce is concerned with emphasizing the relationship between

In addition to ferreting out these strands of continuity in the development of Peirce’s theory of belief, we have already seen that Peirce has a logical basis for the science-vital matters distinction with respect to belief, as the conceptual differentiation of practical belief and scientific hypothesis is based firmly on his classification of the

²⁴⁰ I will take up the question of how Peirce can think both that methods of belief fixation that are not truth conducive have a place in vital matters and that belief aims at the truth shortly.

sciences.²⁴¹ We have also seen that Peirce’s claims that belief has no place in science are supported by his own definition of belief, which describes an intrinsic connection to action and a close parallel to assertion.²⁴² These three arguments, taken together, provide strong support for Peirce’s “no belief in science” thesis being consistently held and internally cohesive. Now, as a final order of business, it is necessary to demonstrate that the application of the clarified versions of Peirce’s concepts of belief and hypothesis will dissolve any remaining concerns regarding the compatibility of his description of scientific inquiry as a method of belief fixation and his thesis that belief has no place in science.

6.3 Testing The Revised Conservative Position

I have advanced, on a textual basis, a revised version of the conservative position regarding Peirce’s theory of belief – one which I have argued captures Peirce’s intended theory more accurately than its competitors. I hope now to demonstrate that Peirce’s original view, as I have described it²⁴³, is capable of resolving the standard difficulties in response to which the modified versions of his theory have been advanced. Addressing a complaint shared by our two contributing Peirce scholars should help to demonstrate the advantages of the revised conservative position. The complaint that I have in mind is articulated by Christopher Hookway in a form quoted by both Misak and Migotti: “if application of the scientific method cannot (or should not) produce *belief* at all, it is hard to see how we can view the method of science as a method for the fixation of *belief*.”²⁴⁴

²⁴¹ This argument was made in response to Misak’s position.

²⁴² This argument was made in response to Migotti’s position.

²⁴³ Of course, when I say Peirce’s “original view”, what I mean is my reconstruction of that view, based on a conservative reading of texts.

²⁴⁴ *BCM*, 23.

Migotti labels this problem “a conundrum”, “vexing” to the would-be Peircean.²⁴⁵ Misak believes that Peirce “just makes a mistake”, one that leads to a “contentious” view better off abandoned.²⁴⁶ Each attempts to do away with the problem; Misak by excising a chunk of Peirce’s writing on belief, Migotti by developing Peirce’s notion that there are two types of holding for true into the position that Peirce saw belief as being also of two kinds. Let us now see whether my proposed position can save Peirce from this predicament without either excising his entire “no belief in science” thesis, as Misak’s version of the theory does, or allowing belief to sneak back into science, as Migotti’s version of the theory permits.

The first step in reconciling Peirce’s seemingly disparate views is to recognize that Hookway’s formulation overstates the problem. Peirce never actually says that scientific method “cannot (or should not) produce belief at all”²⁴⁷, but merely that belief cannot participate in the scientific method. This makes it much easier to comprehend how the second half of Hookway’s complaint can be reconciled with the first, as Peirce does certainly seem to suggest that inquiry can produce belief.²⁴⁸ Upon closer examination, this is both reasonable and intelligible: in producing well-supported hypotheses, scientific inquiry can and does participate in the production of practical belief. We have even seen how the transition from a scientific hypothesis to a practical belief can take place: once a hypothesis has attained the status of “established truth”, it is common sense practice to base practical belief upon it, and this approach likely often produces beliefs that work quite well. As Misak so successfully argues, instinct can be a

²⁴⁵ *PVRB*, 44.

²⁴⁶ *PVM*, 165.

²⁴⁷ *BCM*, 23. Emphasis omitted.

²⁴⁸ Most notably, of course, in “The Fixation of Belief.”

catalyst for science in that it fuels the formation of hypotheses, and instinct would likely also compel us in many cases to accept the well-supported hypotheses and base our beliefs for the purposes of vital matters upon them.

It is perfectly cohesive to say that belief cannot participate in science itself, despite being a product of it – after all, that would undermine the motive for doing science, as the absence of the attitude of dissatisfaction with what one already knows that Peirce sees as part of the will to learn would act, on his view of the relationship between doubt and belief, as a barrier to even consider embarking on inquiry. It is also perfectly legitimate, in the most obvious common sense manner, to adopt scientific hypotheses as practical beliefs, though Peirce’s consistent separation of the two reveals that doing so does not *make* the scientific hypothesis *into* a belief. The experiential success of the solid common sense practice of adopting well-supported hypotheses as belief may obscure the fact that one never actually becomes the other; rather, hypotheses give rise to belief, but only when a judgment is made that the support provided by the scientific enterprise is sufficient to warrant the birth of a new belief. Consciously or not, the epistemic agent ceases to see the proposition in question as a hypothesis and asserts it confidently – though to science, a hypothesis it remains. It is not the case, then, that Peirce banishes belief from science only to have it sneak in the back door. Simply put, science can produce what he calls “extra-scientific certainty”²⁴⁹, but what we must recognize is that said production is an external matter. Science tirelessly pursues its researches; scientists, being but human and most certainly fallible, cannot inquire ceaselessly or in all directions simultaneously – even the most devout scientist has vital matters to which she must attend. And when the time comes when one must make an assertion, where belief is

²⁴⁹ *RLT*, 4:176-177.

called for, it is not only commendable but likely most efficacious to base one's beliefs on the so-called established truths of science. Hence, *contra* Hookway, it is not at all incongruous for Peirce to claim both that belief has no place in science and that inquiry, which at its best is a scientific business, can produce belief.

Despite the success of the revised conservative position in addressing the complaint just discussed, there is a second, and perhaps even more serious, concern at hand – one which the fan of Peirce's account of belief will find alarming. That concern is this: now that we have attributed a plausible and internally consistent theory to Peirce regarding belief, what is to be done if that theory puts another part of his overall system out of joint? I have made the weaker half of my case, which is that Peirce's theory of belief can be construed as consistent, but still owe an account of how that theory of belief can be reconciled with the remainder of his epistemology to make the stronger point that Peirce's theory of belief coheres with the rest of his system. In order to make that point, the natural place to turn is to a concern alluded to by Misak, who worries that a central part of the Peircean architectonic is rendered inaccessible by his later theory of belief. That area, she suggests, is Peirce's account of truth.²⁵⁰ Specifically, the concern is this: if belief is strictly in the province of vital matters, how can it – like science – aim at the truth? Conversely, if belief can aim at the truth, why can't it participate in science? If the revised conservative position cannot respond successfully to this objection, a plausible reason to retreat to the parsimonious position emerges.

However, we need not see that retreat as imminent as, like Hookway's concern, the problem of getting at truth through a belief-less science and a science-less belief is

²⁵⁰ Specifically, Misak is concerned with demonstrating that Peirce's account is compatible with his sometimes expressed thesis that belief (and not just science) does aim at the truth.

less daunting once deconstructed. What we have here are two separate ideas that seem supportable on the basis of Peirce's "no belief in science" thesis and his description of the performance of belief in vital matters: the first is that science operates in a beliefless void; the second is that belief operates in an unscientific pursuit of a ready solution to the problems posed in practice. These ideas are easily reconciled with one another, but not with the third notion that both belief and scientific inquiry aim at the truth – after all, how can two things so different have the same end?

The point that must be made with respect to this apparent problem is that Peirce never explicitly takes ownership of either of the first two ideas just expressed, and that there is considerable support for their reconcilability within the work that we have been discussing. With respect to the first idea, there is all kinds of room to argue, as Misak does quite well, that even the most ascetic of scientists is operating with a truckload of background beliefs. As Misak puts it, the scientist must believe, and in quite a variety of propositions. She must believe that her regulative assumptions are accurate and that her "stock of habitual cognitive skills" is reliable.²⁵¹ For example, the scientist must believe that scientific inquiry is a worthwhile pursuit and adhere to certain guiding principles for its successful execution. Misak is correct in identifying the existence of a body of background beliefs even in scientific inquiry, but this need not undermine the "no belief in science" thesis that Peirce advances – after all, that position calls for no belief *in* science itself, not the banishment of belief from all of the contexts in which scientific inquiry is embedded.

It is also the case that belief can be allowed as a background against which the uncertain hypotheses that comprise the stuff of science are tested without presuming that

²⁵¹ *PVM*, 159-162.

science itself upholds those beliefs as infallible or outside the scope of inquiry. Rather, science proceeds but one inquiry at a time, and what is treated as constant for the purpose of considering one hypothesis might well become the subject of a later inquiry. We also might well make mistakes regarding the assessment of a hypothesis if the background beliefs that set the parameters of the inquiry are mistaken. In situations where it is later recognized that such errors have been made, new inquiry is necessary and often a formerly “established” truth loses its hold and the thrust of investigation in that realm of science is adjusted accordingly.

All of this can be reconciled with Peirce’s notion of science – its essential disinterestedness and its character of being fundamentally divorced from action, as well as its tendency to produce propositions so well-supported that they will be adopted by many people as common-sense beliefs. What Peirce does say in excluding belief from the internal processes of scientific inquiry is that if we are to operate as scientists, we cannot believe the hypothesis that is currently the subject of our inquiry. Thus, the admission of the possession of background beliefs on the part of the scientific inquirer should not lead to the conjecture that she also has belief within the context of her very specialized, very particular, inquiry. Within those bounds and concerning the hypothetical proposition under consideration, she is beliefless, much in the way that an astronaut on board a space shuttle is without gravity, though he knows very well that it holds for him elsewhere. It is nonetheless a limit of science as a discipline that it proceeds one hypothesis at a time, sometimes grudgingly, slowly, in what Peirce sees as an interminable march towards a network of ever more feasible hypotheses, towards the end of inquiry – truth.

With respect to the second idea, that belief operates in a complete disconnect from science, we have already seen that Peirce's theory does not require this. In fact, understanding how both science and belief aim at the truth relies on understanding Peirce's suggestion that science produces extra-scientific certainty, and that certain well-supported hypotheses take on the status of established truths in practice. Science clearly does and can inform belief, and we should not be surprised to find that Peirce thinks that belief is at its best when it is so informed – when it operates, one might say, pseudo-scientifically. Support for this notion within Peirce's writings is widespread: in "The Fixation of Belief" he suggests that we can support questionable beliefs only "in the absence of any facts to go upon"²⁵²; once facts impinge upon us in unpleasant ways it is difficult indeed to avoid adjusting our belief-set.

It is also important to make the point that belief, though sometimes founded on instinct, is not by nature unreasonable. While beliefs may owe their inception to the impetus of instinct, their continued participation in the corps of our accepted propositions often does require reasoning, and since Peirce thinks all reasoning is self-correcting, everyday practical belief will ultimately move towards truth – just much more slowly than science does, or scientifically informed belief. That everyday belief does move towards truth makes a great deal of sense: after all, we experience many challenges and stressors in practice that do not exist in laboratory conditions, and even the most dogmatically tenacious believer is willing to revise a belief when it is false in a way that will cause him serious harm or inconvenience. As such, in a loose and haphazard way, our everyday beliefs – when challenged – have a tendency to move towards truth, unless we take pains to avoid progress in that direction for some reason external to the belief

²⁵² W3:245.

itself. However, even though practical belief does aim at truth in a rough and ready sense, Peirce's position nonetheless upholds science as the most sure way of discovering truth. Scientific inquiry and belief both aim at the truth: the former does so as an automobile drives on a smoothly paved interstate highway, moving a sedate ten kilometers an hour; the latter as the same automobile drives on a hilly coastal highway moving at breakneck speed – in the pouring rain. Clearly, one method is more likely to allow the driver to arrive in one piece.

Given what he sees as the sturdy and immovable character of science, it is not surprising that Peirce constantly exhorts us to be more scientific, to pursue inquiry wherever possible if we would like to get to truth. This exhortation expressed in terms of belief fixation in his early epistemological work seems at odds, however, with the dismissive talk about belief that we see in the later period, but this is easily clarified. Simply put, Peirce is often ambiguous as to whether he is speaking descriptively or normatively. In sliding between descriptive and normative talk of belief, Peirce rarely signals the change, but describes belief from both positions, which can be confusing. An example of this phenomenon appears in “The Fixation of Belief”, where in a single page he makes both the descriptive claim that “the sole object of inquiry is the settlement of opinion” and the normative claim that “It is certainly best for us that our beliefs should be such as may truly guide our actions”, with no indication that he is making a transition from describing how the psychological processes of inquiry *are* to making a value claim about how belief *should be*.²⁵³ In spite of this sometimes frustrating lack of clarity within Peirce's discussions of belief, I have endeavoured to show that not only does Peirce not explicitly support the theses the belief is always essentially unreasonable or that science

²⁵³ W3:248.

operates in a belief-less void, but that there is in fact considerable textual evidence supporting the notion that Peirce thinks that the best science can legitimately be viewed as a source of propositions fit for belief and that the best beliefs are formed on the basis of extra-scientific certainty. Thus, since belief and science can operate compatibly, it is not the case that banishing belief from the internal workings of science severs the fundamental connection between either belief and truth or science and truth.

7. Conclusion

At the end of this investigation into Peirce's account of belief, several conclusions can be drawn. In presenting Peirce's work on belief chronologically, it has become apparent that his later theory of belief is a development of his early views, rather than a refutation of them or an error made in spite of them. In exploring how Peirce presents his theory of belief, especially in the Cambridge and Harvard lectures, it has become obvious that his "no belief in science" is more nuanced and more sympathetic than it first appears. Finally, in evaluating Peirce's theory of belief in light of the double aspect question, I have concluded that it is not necessary to modify Peirce's theory of belief by excising difficult material or to reframe it in terms of a dualistic conception of belief. Although it cannot be disputed that Peirce's account seems contradictory on the surface, close reading reveals a consistency of thought and purpose within his writings on the topic of belief.

Based on my attempts to develop arguments for what I have labelled the revised conservative view, I submit that the option of maintaining Peirce's account of belief in its original form is now clearly viable. Developed primarily in contrast to the work of Misak and Migotti, the arguments for my thesis that the seemingly contradictory epistemological view presented by Peirce are actually continuous are: firstly, that Peirce advances a science-other distinction in his early work; secondly, that Peirce has a logical basis for his distinction between science and vital matters, which is found in his classification of the sciences; and thirdly, that Peirce's claims that belief has no place in science are in line with his own definition of belief. I have also attempted to address possible objections to my view, such as the Hookway objection and the concern regarding an apparent disjunct with Peirce's theory of truth. Despite all this, the

temptation may still exist to throw that account overboard, salvage what one likes, and try to construct a better bet. That temptation owes its appeal to the fact that the gap between practice and philosophy that Peirce persists in maintaining and idealizing strikes many minds as troublesome. However, the foregoing analysis should suffice to demonstrate that since Peirce's "no belief in science" thesis is founded on his classification of the sciences, which upholds the supremacy of logic and views philosophy as coextensive with logic, revising his theory of belief requires revising his system at a much larger scale – and even then, to do so, one would need to import foreign first principles. We can conclude that although one might disagree with Peirce's insistence on the separation of science from everyday practice for various reasons, close analysis of his texts reveals an account that is both internally consistent and commensurate with the larger body of his epistemology.

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