The Pragmatic Maxim and the Proof of Pragmatism (2): After 1903

A Máxima Pragmática e a Prova do Pragmatismo (2): Depois de 1903

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Abstract: In "The Pragmatist Maxim and the Proof of Pragmatism" (*Cognitio* v.6, n.1), I tried to clarify the strategy Peirce employed in *Lectures on Pragmatism* (1903) to argue for (or "prove") his pragmatism maxim. This proof was designed both to clarify the content of the maxim and to demonstrate its correctness. The current paper is a sequel to that one, and it considers Peirce's attempts to argue for pragmatism in writings from after 1903. As in the earlier paper, I am concerned with identifying the strategies he employed for defending the doctrine rather than the details of his execution of his strategies. And an important issue concerns why he did not rest content with the 1903 argument and, apparently, looked for a different sort of approach. Was this because he thought that the earlier argument failed to establish its conclusion? Or was it because he thought that the earlier approach did not provide a fully perspicuous "explanation" of why the maxim was correct?

Key-words: Peirce. Pragmatist maxim. Proof. Consequence. Practical bearings.

Resumo: *Em "The Pragmatist Maxim and the Proof of Pragmatism"* (Cognitio v.6, n.1), *eu tentei esclarecer a estratégia utilizada por Peirce nas* Conferências sobre Pragmatismo *(1903) para argumentar em prol de (ou "provar") sua máxima pragmática. Essa prova visava tanto esclarecer o conteúdo da máxima quanto demonstrar sua correção. Este trabalho é uma continuação daquele e debruça-se sobre a tentativa de Peirce de argumentar em prol do pragmatismo nos escritos de depois de 1903. Como no trabalho anterior, estou mais preocupado em identificar as estratégias que ele utilizou para defender a doutrina do que nos detalhes de sua execução dessas estratégias. E um assunto importante concerne ao porquê de ele não se satisfazer com o argumento de 1903 e, aparentemente, buscar um tipo diferente de abordagem. Terá sido porque achava que o argumento anterior havia fracassado em estabelecer sua conclusão? Ou porque achava que a abordagem anterior não fornecia uma "explicação" plenamente perspícua do porquê de a máxima estar correta?*

Palavras-chave: *Peirce. Máxima pragmática. Prova. Conseqüencia. Conseqüências práticas.*

In 2004, I gave a paper to an international congress on the philosophy of Peirce in São Paulo that was subsequently published in *Cognitio* under the title "The pragmatist maxim and the proof of pragmatism" (HOOKWAY 2005). The paper was concerned with an issue about Peirce's writings after 1900. Once William James had publicly defended pragmatism, the views that Peirce had first introduced twenty years earlier attracted widespread interest and, in some places, notoriety. Starting with a series of lectures delivered in Harvard in 1903, Peirce was anxious to establish his own paternity of the doctrine and to show that his version was much better than James's. One respect in which it was better was that it received a more rigorous formulation and that its content was realist rather than nominalist. A second advertised advantage of the Peircean version was that its correctness could be proved. Where James sketched the pragmatist maxim, pointed out how it could help us to escape from metaphysical dilemmas and suggested that his readers should adopt it in the hope of further such advantages[1], Peirce promised a strict "mathematical" proof.

After considering why Peirce thought that such a proof was desirable and explaining what sorts of features it should have, my earlier paper provided an account of how the proof offered in the 1903 Harvard *Lectures on Pragmatism* was intended to work. Those lectures are dense and complex, touching on many areas of Peirce's thought, so I concentrated upon identifying the general *strategy* of proof that he employed rather than upon the details of his execution of that strategy. The general shape of the proof is quite straightforward and much of the difficulty of the *Lectures* reflects Peirce's attempts to establish the truth of various premises upon which the core argument depends. Although Peirce thought well of this proof, he continued to try to construct a "proof of pragmatism" in papers, published and unpublished, from 1905 and later. One question we must consider concerns why Peirce did not rest content with his 1903 effort. Did he decide that the earlier strategy was flawed and look for a new way of proving pragmatism? Or did he continue to endorse the earlier strategy while being dissatisfied with the way that it was executed in his lectures?[2]

Initially, I envisaged that this paper would complement the earlier one by considering all of Peirce's attempts to prove pragmatism from after 1903. Its current version is less ambitious than that. It considers Peirce's attempts to defend Pragmatism in some papers in the *Monist* from 1905 and 1906 together with some manuscripts written while he was working on the continuation of that series of papers. I hope to write a sequel to this paper to explore some later work, especially some papers from 1907 when he used the concept of the "ultimate logical interpretant" as a tool in defending pragmatism. It is an interesting question whether a different strategy for proving pragmatism is used in those manuscripts.[3]

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[1]   This desciption of James's attitude towards pragmatism is suggested by the second of his Lectures on Pragmatism (JAMES 1975, chapter two).

[2]   It may be relevant that Peirce never prepared the 1903 proof for publication. Much of it moves very quickly and it is unlikely that he ever thought that he had arrived at a satisfactory way of expressing his argument. So I suppose there is the further possibility that he knew how the proof worked but had difficulty in providing a perspicuous expression of his achievement.

[3]   This argument is discussed briefly in HOOKWAY 2003. The most important of these manuscripts is in EP2 (chapter 28).

The present paper begins by introducing Peirce's pragmaticist maxim and his search for a proof of it (section 1). We then describe the strategy involved in the proof that Peirce offered in his 1903 Harvard Lectures (section 2) and use a letter of Peirce's to identify the problem that suggested that this proof was incomplete (section 3). Sections 4 and 5 explain how he used new resources in constructing his proof around 1905, in particular his system of Existential Graphs, but we then argue, using a passage from one of Peirce's manuscripts, that he thought that the argument based on the graphs was incomplete for reasons very similar to those which left him dissatisfied with the 1903 proof (section 6). The final section considers how other ideas that Peirce employed around 1905 might be relevant to the solution of this problem.

1. Pragmaticism and the Proof of Pragmatism

Peirce's pragmaticist maxim is a methodological rule, one that is supposed to make a major contribution to our ability to exercise "logical self-control" in all of our cognitive activities. Applying this rule should give us *complete* reflective clarity about the contents of concepts, propositions and hypotheses. Its use should provide information that is indispensable if we want to evaluate a proposition or theory, and it can also be invaluable (according to Peirce) in alerting us to cases where representations that appear to be important and intelligible to us fail to express propositions with any real intellectual content. Peirce's favourite formulation of his maxim, employed on a number of occasions) is as follows:

> Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then our conception of those effects is the whole of our conception of the object. (1878, W3: 266; 1903, EP2: 135; 1905, EP2: 346)

When we exercise logical self-control over our beliefs and inquiries, we should identify the "consequences that might have practical bearings" that theories and propositions have, and we evaluate these theories and propositions by investigating whether those consequences are forthcoming. And, of course, if a proposition does not have such consequences, it should be dismissed as lacking cognitive content.

When Peirce delivered his lectures on Pragmatism at Harvard in 1903, he announced that he could provide a "strict proof" of the correctness of the doctrine. He explained what a "strict proof" was by comparing it with the proofs offered by mathematicians. Whether mathematical certainty is possible, or even desirable, in connection with this kind of issue is a controversial matter that I shall not be addressing here. We can agree that, in supporting pragmatism, it is desirable (if possible) to have more than an inductive indication that relies on the observation that the pragmatist maxim has provided a valuable aid to inquiry in the past. Peirce seeks an argument that goes beyond this by meeting three further conditions:

> (1) It should do more than show us that the pragmatist maxim is a useful intellectual tool. It should also provide an *explanation* of *why* the maxim is correct. This will require him to derive the correctness of the maxim from his work in logic and semeiotic, drawing on his other philosophical views.

(2) It should provide a better *formulation* of the maxim, supplying a better understanding of what the content of the maxim is, of just what it says. This was of particular importance for Peirce because he was aware that other pragmatists exploited versions of the maxim of which he did not approve. And the formulation we noted above leaves a lot of questions unanswered, for example: just what does "consequence" mean here and, particularly important, what is involved in such consequences having "practical bearings"? What kinds of "consequences" can actually have such practical import?[4]

(3) Third, it should be *persuasive*. By this I mean that it is desirable to find an argument for pragmatism that could be endorsed, not only by someone who shares Peirce's own philosophical assumptions, but also by "high metaphysicians" and "the entire nominalist nation" who would not share those assumptions in advance of encountering the argument. Thus an argument that took for granted that there was no substantive a priori knowledge and relied upon the truth of realism might provide reassurance to Peirce himself, but it would not persuade those who stood to gain most from pragmaticism. In order to persuade Peirce's rivals, the argument should also establish the emptiness of substantive a priori knowledge and the errors that are involved in nominalism.[5]

Earlier in the paper, we took note of the best-known canonical formulation of the pragmaticist maxim. We have also observed that this formulation gains its strength from its vagueness about just what "practical consequences", and we have recognized that Peirce expected his search for a "proof" to lead to a more explicit statement of the content of the maxim. The later writings contain a number of such reformulations. Here are three of them:

1903: Pragmatism is the principle that every theoretical judgment expressible in a sentence in the indicative mood is a confused form of thought whose meaning, if it has any, lies in its tendency to enforce a corresponding practical maxim expressible as a conditional sentence having its apodosis in the imperative mood. (1903, EP2: 134-5)

1905: The entire intellectual purport of any symbol consists in the total of all general modes of rational conduct that, conditionally upon all the possible different circumstances and desires, would ensue upon the acceptance on the symbol. (1905, EP2: 346)

1905: If one can define accurately all the conceivable experimental phenomena which the affirmation or denial of a concept could imply, one will have therein a complete definition of the concept and *there is absolutely nothing more in it.* (EP2: 332)

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[4] In his Harvard Lectures, Peirce is explicit that the search for a proof should equip us with a better formulation of the maxim (EP2: 134). For further discussion, see HOOKWAY (2004: 135 and 2005: 27-30).

[5] See HOOKWAY 2000, chapter twelve.

The first two are fairly similar, and they cash out the talk of "practical consequences" explicitly in terms of possible consequences for what *actions* it is rational for us to perform if some proposition is accepted. The second formulation is helpful in making clear that we can derive these practical consequences only relative to a context made up of "circumstances and desires". We do not derive practical consequences from the proposition being clarified alone. The third is somewhat different, making no reference to actions or desires, but talking instead of "experimental phenomena". This is similar to formulations that seem more verificationist in character: thus he says that there is nothing to a concept but "sensible consequences". Peirce appears to suppose that these are equivalent. This may be so, but demonstrating it would require an account of the role of experience in regulating actions (see HOOKWAY 2004 for further discussion).

2. The Strategy Employed in 1903

We shall understand how the proof may work by examining the strategy employed in the 1903 Harvard lectures (cf. HOOKWAY 2005)

> 1. In order to defend pragmatism we have to show that it is a correct norm to use in exercising logical self-control in the course of inquiry.
>
> 2. The logical norms we have to use are fundamentally concerned with determining which *arguments* are good.
>
> 3. There are just three kinds of arguments: deduction, induction and abduction.
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> 4. The pragmatic maxim is the fundamental norm that determines whether abductions are good. Clarifying the hypothesis in the light of the pragmatist maxim brings to our attention *all* the information about the content of the hypothesis that we need to take account of in order to evaluate whether we should take it seriously as an abductive suggestion.
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> 5. Whether pragmatism is correct makes no difference to the soundness of deductive or inductive arguments that is not a consequence of its effects on abductive ones.
>
> So: the pragmatist maxim is correct.[6]

The general shape of the proof has two components. First, Peirce provides an account of all the kinds of cognitive activity that we employ in carrying out inquiries using the method of science. If he can succeed in doing this, then he can argue for the correctness of the pragmatist maxim through a sort of exhaustive analysis of what information we require if we are carry out inquiries through exercising logical self- control. He can do this by considering each of these kinds of cognitive activity in turn and demonstrating, in

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[6] Another version of this argument can be found in a letter that Peirce wrote to Mario Calderoni in 1905 (see CP 8.209f). This is discussed more fully in section 3 below.

each case, that responsible engagement in this form of cognitive activity cannot require us to have access to any information about our concepts and hypotheses which would not be uncovered through the application of the pragmatist maxim. The success of the argument depends upon the completeness of our account of the kinds of cognitive activity, and upon our being able to identify the requirements for carrying out such activities in a systematic way. The latter will depend upon our being able to represent the different forms of cognitive activity in ways that are highly perspicuous, that enable us to see what the requirements are for using them.

The argument employed in 1903 thus began by arguing that the only cognitive activities we need to take account of are the three forms of argument, deduction, induction, and abduction. Peirce had been arguing for this conclusion, on different occasions, for some thirty years. In the 1903 lectures, the second stage of the argument was not explored in very much detail: what he had to do was show that, when using arguments of these kinds, we never have to make evaluations using concepts which cannot be fully elucidated by showing how the fact that the concept applied to something had effects upon what it was rational for us to *do* or upon what perceptual experiences we should anticipate.

3. Peirce's Reasons for Thinking that Proof Needs Supplementation

Peirce returned to the task of trying to prove the correctness of the maxim on many occasions after 1903. As was noted above, this may have been because he found it difficult to prepare his ideas for publication. However, there is evidence that he was dissatisfied with the argument he offered in the Harvard lectures. For example, in a manuscript from 1905, he wrote that his 1903 proof "was far from being a simple one; for its presentation occupied seven carefully written lectures in Harvard University, and yet still left too many difficulties" (MS 279). A useful source here is a letter written to the Italian pragmatist, Mario Calderoni, also in 1905, which concludes that the argument "goes to show that the practical consequences are *much*, but not that they are *all* the meaning of a concept" (CP 8.211). Indeed, the argument "neither proves, nor tends to prove", the correctness of the pragmatist maxim. Peirce concludes that "a new argument must supplement" the earlier one, but it is not easy to see why this supplementation is required or what form it should take.

In the preceding paragraphs of his letter, Peirce presents a version of his earlier argument, albeit with some useful amplification. The most striking change is that while, in 1903, he described pragmaticism as "the whole logic of abduction", he now describes it as "simply the doctrine that the inductive method is the only essential to the ascertainment of the intellectual purport of any symbol" (CP 8.210). The use of deductive reasoning provides no threat to pragmatism because "it is applicable only to the ideal state of things" and "merely gives a new aspect to the premises" (*ibid*). Abduction provides us with new ideas "but there is no force in the reasoning", it is "mere conjecture, without probative force" (CP 8.209). Induction, by contrast, "gives us the only approach to certainty concerning the real that we can have"; it is "the only capable *imperator* of truth-seeking" (*ibid*). This is not a substantive shift in his view: the pragmatist maxim,

when applied to an abductive conjecture, provides all the clarification that is required for testing the conjecture inductively or experimentally.[7]

So why did Peirce think that his proof required supplementation? In defending his claim in CP 8.211, Peirce introduces a view about the "sole purpose and sense of thinking", a view about the function of the human intellect. Having observed that "all the more active functions of animals are adaptive characters calculated to insure the continuance of the stock", he conjectures that something similar applies to our intellect:

> … the human intellect is implanted in man, either by the creator or by a quasi-intentional effect of the struggle for existence, virtually in order, and solely in order, to insure the continuance of mankind.

The next step is to observe that *if* this is true, then pragmaticism is secure: "how can [the intellect] have such an effect except by regulating human conduct?". The argument suggests that, whether we employ a Darwinian account of the function of cognition or defend some kind of creationist story, we can recognize that the there is nothing to cognition apart from the "inductive method" whose adequacy is definitive of pragmaticism.[8]

Although Peirce's letter suggests that no one could have the "slightest hesitation" in accepting this view about the purpose of cognition, the following paragraph offers reasons for us to hesitate. Regulating our conduct in ways that ensure the survival of ourselves and of mankind is undoubtedly one of our aims in inquiry, but we seem to have other aims too. We take ourselves to have "some glimmer of co-understanding with God, or with Nature"; we have evidence that "man really penetrates in some measure the ideas that govern creation". We cannot doubt that creation has an "ideal purpose", which is most likely to involve "the development of an idea" than successful action. Many of our inquiries involve the inductive testing of abductive suggestions, and for those, the adequacy of pragmaticism is established by Peirce's argument. But our apparent attachment to the ideal purpose described above leaves open the *possibility* that some of our inquiries may employ ideas are not fully in harmony with pragmaticism. The 1903 argument must be supplemented in order to close off that possibility.

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[7] The following paragraph does point out one form of supplementation that is required: "the argument must be supplemented by examples of the wholesome effect of pragmatistic interpretations". Peirce provides a familiar illustration, to the concept of probability. I suspect that this is required for reasons that are rhetorical rather than strictly logical. Those who were sceptical of pragmaticism may refuse to be convinced by Peirce's argument, suspecting that something must have gone wrong, even if they cannot identify where the error lies. Convincing examples may be effective in persuading readers to take the argument at face value and accept the conclusion rather than questioning the premises.

[8] It is interesting that although Peirce initially mentions a Darwinian explanation of our cognitive capacities, he quickly discards this and insists that we all have responses that are non-Darwinian. It may be useful to read Peirce's 1908 paper on "A neglected argument fore the reality of God" as part of an attempt to show that religious belief did not conflict with pragmaticism.

A letter written quite late in his life provides another clue to Peirce's worries about his proof:

> I am unable yet to *prove* that the three kinds of reasoning I mean are the *only* kinds of sound reasoning; although I can show reason to think that it can be proved, and *very strong* probable reasons for thinking that there is no fourth kind. (NEM3: 177-8, 1911)

If this is correct, then in 1911 he could not provide a strict proof employing the 1903 strategy: premise 3) cannot be established. Perhaps the 1903 argument could establish the conditional conclusion that *if* there are just the three kinds of argument that he described, then the pragmatist maxim was correct; but if could not establish that there are just those three kinds of arguments, then the proof could not establish its desired conclusion. In that case, the worry is that he did not have a complete account of all of the cognitive activities that are involved in carrying out inquiries.

The two reasons for thinking that the proof is incomplete may be related. The possibility that our reasoning has an ideal purpose that is incompatible with pragmatism would presumably require that are forms of reasoning – or other kind of cognitive activity – which we need to use in reasoning which are governed by this elevated ideal but which are not required when we carry out inquiries using the inductive method. Pragmaticism employs a distinctive account of what kinds of cognitive activities there are. Both in the letter to Calderoni and in the 1911 letter, we see Peirce acknowledging the *possibility* that, even if his pragmaticist story works for some of our inquiries, there may be other inquiries which require us to employ a richer cognitive repertoire.

4. Papers for the Monist

After the 1903 lectures, Peirce's first extended engagement with his search for a proof of pragmatism occurs in a body of work from 1905-1906. Peirce was trying to produce a series of papers to appear in *The Monist*, which would culminate in a proof of the pragmatist maxim that would enable him also to show why his version of the doctrine was superior to the versions offered by other philosophers such as William James. The first three papers of the series were published, and we also have manuscripts that were intended to form part of the continuation of the unfinished series.

There is little in the published papers to suggest that he intended to do anything other than provide a more polished and detailed account of ideas that were already familiar. "What pragmatism is" provides some careful formulations and applications of the pragmatic maxim, together with a more careful account of what is involved in self-control, especially when applied to the activity of inquiry, than he had previously given. This is valuable because the 1903 "proof" made use of the concept of logical self-control but, although it prepared the way for understanding it through discussion of the categories and the normative sciences, it offered little in the way of a detailed account of just how such self-control worked. Another feature of these papers was a much more careful concern with bringing out the differences between his own form of pragmatism (now called "pragmaticism") which contributes to a clearer understanding of just what the proof has to establish. "Issues of pragmatism" is mostly concerned to introduced two doctrines which were, he thought, indispensable to pragmaticism, as he now began to

call his distinctive take on pragmatism.[9] These were realism and critical commonsensism. The former was familiar from the 1903 lectures, but common sense was not discussed there. This, although this may have a role in explaining how propositions and principles which seem to be a priori were in fact consistent with the maxim, it is hard to find anything in these papers which suggests that Peirce's ideas about what strategy to adopt in proving pragmatism had changed. In general, whatever Peirce's plans may have been for subsequent papers in the series, there is little in these two papers that could not be read as providing material that provides details which complement the arguments that have been painted with a broad brush in his 1903 lectures.

5. Existential Graphs

The third paper does seem to offer something new. It's title promises a "prolegomenon to an apology for pragmaticism", and the paper was largely an extended treatment of Peirce's existential graphs. We should consider, in general terms, just how this system of formal logic was supposed to contribute to the proof. Early in the paper, he proposed to introduce the reader to "a very simple system of diagrammatization of propositions which I term the Existential graphs" (CP 4.534).[10] This would enable him to do two things:

> 1) I shall be able almost immediately to deduce some important truths of logic, little understood hitherto, and closely connected with the truth of pragmaticism.

> 2) … while discussions of other points of logical doctrine, which concern pragmaticism but are not directly settled by this system. They are are nevertheless much facilitated by reference to it.

His ostensible reason for taking up this issue was explained in the previous paragraph. Using an example, he has made two points. The first, familiar to his readers, was that mathematical reasoning involves experimentation upon diagrams, and thus that reasoning is facilitated by constructing a diagram "as to afford a clear view of the mode of connection of its parts, and of its composition at each stage of our operations upon it" (CP 4.533). But, whereas mathematics treats diagrams merely as means to the end of solving the mathematical problem at issue, and thus seeks "the speediest and most abridged of secure methods", the logician is concerned to understand the processes involved in reasoning and thus will sacrifice speed in order to "make each smallest step of he process stand out distinctly, so that its nature be understood." As Peirce concludes, "[h]e wants his diagram to be as analytical as possible".

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[9]   It is noteworthy that these two papers were already in print when Peirce wrote his letter to Calderoni discussed in section 3. This confirms that Peirce continued to make use of his 1903 argument in defending his pragmatism when he wrote the papers for the Monist. And it also suggests that the doubts about the completeness of the argument that were enunciated in that letter were in his mind when he was working on the continuation of that series of papers.

[10] There a number of good sources of information about the Existential Graphs. Examples include PIETARINEN 2006: chapters four and five, and ROBERTS 1973.

This distinction between two kinds of proofs will prove important and I want to try to clarify it a little. In both cases, we arrive at a conclusion by "experimenting upon" diagrams of the premises. All that is required of a *mathematical* demonstration is that we know *that* so long as the premises of the argument (or the statements of the problem) are correct, then so is the conclusion. The techniques we employ are guaranteed to provide us with the right answer to our question or the collect solution to our problem. We can be confident in our use of such techniques even if we do not *understand why* they are reliable. All that we require is that they provide effective means for achieving our goals. A *logical demonstration* offers more than this: the diagrams, notations, and rules that we use enable us to see *why* the conclusion follows from the premises. The demonstration can provide understanding as well as truth. A system of logical notation provides diagrams not only of the premises and conclusions of our reasoning, but also of the processes that explain what makes the reasoning valid. All logical demonstrations are mathematical demonstrations, but many mathematical demonstrations do not meet the conditions for being a logical demonstration. All the time that formal logic was based upon boolean algebras, it was not possible to achieve the ideal of a logical demonstration in logic. The existential graphs were offered as a way of providing diagrams of propositions and demonstrations of conclusions that meets this ideal to the greatest degree that it is possible to do so.

The remarks in the paper about how the graphs are related to the proof of pragmaticism were allusive. Although we are promised logical results that are "closely connected with the truth of pragmaticism", the final sentence of the paper announces that "the utility of this diagrammatization of thought in the discussion of the truth of Pragmaticism" would be the revealed in a sequel to the current paper (CP 4.572). The editors of the *Collected Papers* reproduce a couple of paragraphs from drafts of this paper (CP 4.534n, 572n). These explain how the Existential Graphs were supposed to "furnish a test of the truth or falsity of pragmaticism" (CP 4.534n) but also suggest that Peirce came to doubt that they could provide us with the strict proof he hoped for: "a sufficient study of the Graphs would show what nature is truly common to all significations of concepts; whereupon a comparison will show whether that nature be or be not the very ilk that Pragmaticism (by the definition of it) avers that it is" (see further discussion below). Thus:

> Should the theory of Pragmaticism be erroneous, the student would only have to compare concept after concept, each one, first in the light of the Existential graphs, and then as Pragmaticism would interpret it, and it could not be that before long he would come upon a concept whose analyses from these two widely separated points of view unmistakably conflicted. (CP 4.534n)

Given that the Graphs display the roles of concepts and propositions in argument, it is natural to regard this as involving a strategy in many ways similar to that which was used in 1903. If the graphs display all possible forms of argument, and they reveal nothing that is at odds with pragmatism, then we have a more satisfactory execution of the strategy employed in the Harvard lectures.

6. The Proof Still Needs Supplementation

We have identified why Peirce feared that his proof of pragmatism might turn out to be incomplete. We appear to have an attachment to cognitive goals that go beyond the search for information that can guide our actions and we may not be able to rule out the possibility that these goals are legitimate and that, in pursuing them, we cannot rely wholly upon the inductive method. If we have concepts whose content depends upon their role in such inquiries, then we may have legitimate concepts whose content cannot be fully clarified using the pragmatist principle. The argument Peirce had employed since 1903 needs to be supplemented by an explanation of why this threat is not real, why it is reasonable to think that there are no such concepts. And Peirce wants to do with this without simply abandoning the cognitive projects that prompted the suggestion that some of our concepts are concerned with "the development of an idea" and that we can achieve "some glimmer of co-understanding with God, or with nature".

In exploring this, I want to divide the discussion into two parts. First, how do the Existential Graphs contribute to Peirce's response to these problems; and, second, what other resources does Peirce make use of in his writings around 1905.

There is no reason to think that the whole of Peirce's proof of pragmaticism was to be developed within the system of Existential Graphs. It is more likely that he holds that the graphs are an invaluable tool (perhaps an indispensable tool) - which would contribute to the construction of his proof. But it was most likely that they would serve this role in a context which takes for granted a number of other Peircean views. These may include the derivation of his categories through phanerosocopy, his work on the normative sciences, including the systematic theory of sciences, and his critical common-sensism. It supports this view that the common-sensism was already being emphasized in "Issues of Pragmaticism" in spite of the fact that it was ignored in the Harvard lectures. At least two of his drafts for the fourth paper in the series ("The Basis of Pragmaticism" [EP2: chapters 26 and 27]), written in late 1905 and early 1906, contained extended discussions of phanersocopy and the normative sciences.

The passage about how the graphs were to contribute to the proof that we discussed earlier suggests that the role of the graphs consists in the fact that they might enable us to construct a counterexample to pragmaticism if there is one. Recall Peirce's observation that if pragmaticism is false, we shall eventually (sooner rather than later Peirce suggests) "come upon a concept whose analyses from these two widely separated points of view [the pragmatist maxim and the existential graphs] unmistakably conflicted." (CP 4.534n) How would we recognize such conflict? What would the conflict be like?

Reading "Prolegomena to an apology for pragmaticism" does not provide a clear explanation of how the Existential Graphs contribute to the establishment of the truth of pragmatism. However, it does offer reasons for thinking that the comparison of how concepts are represented in the graphs and how they re clarified by the pragmatist maxim is not sufficient to settle the matter. It is useful to examine a little more closely the passage added to CP 4.535 by the editors of the *Collected Papers*.[11] Four distinctive points are made.

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[11] This passage is an excerpt from just one of several manuscripts that Peirce produced at this time, and no special significance should attach to the fact that it was chosen for inclusion in the Collected Papers. However, as we shall see, we can learn a lot from reflecting upon in it.

> 1. Study of the graphs should provide us with an account of "what nature is truly common to all significations of concepts." (CP 4.535n)

It is natural that Peirce would suppose that such a general theory of how concepts work would be relevant to showing whether the pragmatist maxim provides a recipe for clarifying their content. We might expect that Peirce's semeiotic would be the best place to find the materials for such a theory, but since logic (including the existential graphs) forms part of Peirce's semeiotic, all we have to explain is why this part of semeiotic is given central importance. We can understand this if we recall, first, that for Peirce, all cognitive activity involves inferences and arguments, and, second, we recognize that the graphs provide an especially perspicuous explanation of the logical structure of argument and inference. Since the graphs do not provide representations of inductive and abductive arguments, we may be surprised to find Peirce assuming that an account of our deductive practice should reveal "what nature is truly common" to the contents of concepts.

> 2. The study of "what is truly common to significations of concepts" should provide the foundation for an argument for pragmaticism. This study tells us what concepts are, drawing out the kinds of contents they have, and it is clear that, if the pragmatist maxim is correct, then this is a consequence of concepts having this character.

This holds out the promise of a general explanation of the correctness of pragmaticism: given what we learn about the nature of concepts from studying the graphs, we can investigate "whether that nature be or be not of the very ilk that Pragmaticism […] avers."

> 3. Such an argument may turn out not to be sufficient. This is because "the two terms of the comparison, while in substance identical, yet might make their appearance under such different garbs that the student might fail to recognize their identity."

It need not be obvious whether pragmaticism is consistent with (or a consequence of) the theory of the nature of concepts yielded by the existential graphs, and Peirce cannot rule out the possibility that a general proof of his result can be provided. Peirce illustrates these difficulties by using an example.

> [A] concept might be regarded as the passive object of a geometrical *intuitus* although Pragmaticism certainly makes the essence of every concept to be exhibited in an influence on possible conduct; and a student might fail to perceive that these two aspects of the concept are quite compatible.

We should read this passage in the light of Peirce's letter to Calderoni. In that letter Peirce argued that his earlier proof of pragmaticism was incomplete because it had no systematic answer to those who observe that we recognize the importance of cognitive goals which are that are inconsistent with pragmaticism. Although the example used here is different from the one employed in the letter, we can interpret it as raising the same problem: it may seem to us that we have knowledge of independent abstract objects though a kind of geometrical intuition, and, if this were true, then pragmaticism

would be mistaken. In his letter, Peirce argued that the proof needed to be supplemented by something that would solve this problem. And in the passage used as a footnote to CP 4.535, he seems to admit that appeal to the graphs does not solve the problem. The argument, he acknowledges "may not turn out to be sufficient".

> 4. Even if we cannot use the existential graphs to achieve the positive result of proving the correctness of pragmaticism, we can at least recognize that, were pragmaticism false, the graphs could have a role in contributing to a kind of inductive refutation of the maxim.

All that Peirce says in support of this is that if there are concepts that cannot be clarified using the pragmaticist maxim, there will be some cases where it is obvious ("unmistakable") that this is the case once we use the graphs to study how it is used in our thought. Unfortunately we are not given any explanation of why this is so. One important point here is that Peirce's assessment of the contribution of the existential graphs is that they do not obviously provide a way of solving the problem he mentioned in the letter to Calderoni. But, they may contribute to the construction of a sort of a posteriori argument for pragmaticism.

I have suggested that Peirce's allusive example of geometrical *intuitus* raises issues similar to those presented by the example of the ideal aim of inquiry that Peirce used in his letter to Calderoni. Consider the case of geometrical intuition: the suggestion is that the phenomenology of our recognition of some geometrical truth is that it is an apriori analogue of a platonic entity. The phenomenology suggests that we are apprehending an ideal realm of a sort that seems to be at odds with pragmaticism. Similarly, when we entertain an aim of putting ourselves into harmony with the "ideal purpose" of creation, we are engaging with some sort on non-instrumental higher intrinsic good. Phenomenologically, what we engage with seems real and important; and in each case our recognition of the ideal realm or ideal purpose has a sort of *immediacy*. It does not appear to be the product of the method of induction, and, if we take it at face value, we may find pragmatism hard to accept.

When we use the existential graphs to model our engagement with these ideas, they will tend to be represented as first premises for conscious reasoning. We shall not represent them as conclusions of inferences or as the products of our cognitive activities. Hence the use of the existential graphs will not make explicit how these concepts can be reconciled with pragmatism. We shall need to supplement the graphical representation with a further explanation of these concepts that shows how such phenomena can be explained. The following section briefly considers how such explanations can be constructed.

7. Other Resources

In this section, I shall mention just three doctrines that may be relevant to strengthening the case for pragmaticism and which were present in Peirce's writings at this time.

The first tool that Peirce makes us of at this time is his work in semeiotic. This provides a more general account of cognition of which work in formal logic is only part. An argument for pragmaticism was always likely to make use of views about signs other than those embodied in formal logic. After 1905, this became more prominent, leading

to a new strategy for constructing a proof. But there is evident that extra logical parts of semeiotic were important for Peirce even at the time at which he wrote "Prolegomenon to an apology for pragmaticism."

There is a discussion of pragmatism in "Prolegomena to an apology for pragmaticism", one which is cast in terms of Peirce's semeiotic vocabulary rather than the Existential Graphs. In section four of that paper, he announces that "The Immediate Object of all knowledge and all thought is, in the last analysis, the Percept" (CP 4.540). One might think that this supports pragmatism, but Peirce takes pains to argue that there is, in fact, no inconsistency between the positions, observing that "Pragmaticism […] holds that the Immediate Interpretant of all thought proper is Conduct".[12] If that is right, then Peirce's anxiety about pragmatism is based upon features of our experience of inquiry which support the idea that there are processes of thinking whose immediate interpretant is *not* conduct but is something else, something purely intellectual. This claim that the Immediate Interpretant of legitimate thought is always *conduct* seems implausible and is not obviously a conclusion that Peirce would wish to accept. What pragmaticism seems to be committed to is a weaker claim:

> Legitimate thought terminates in conclusions whose acceptance can be recognized as having implications for what it is rational for us to do in particular circumstances.

This need not involve our actually undertaking any particular conduct, and there is no necessity for us even to think of those implications for possible conduct when our exercise of thinking comes to an end. It may take considerable reflection to identify the implications for action which our conclusion entails. It is hard to see why Peirce thought that the Immediate Interpretant of thought was conduct. At best he may be able to conclude that when thought terminates, it is *possible* for our Immediate Interpretant to be conduct. But this will be the case only if we are in an appropriate context and we possess appropriate desires. Our conclusion will rarely show its implications for possible action on its sleeve, as it were. And this is what seems to be required for conduct to be the *Immediate* Interpretant.[13]

Whatever we may think of the details of what Peirce wrote, it is clear that he identified pragmaticism with the view that thinking and inquiry was an activity that mediated between inputs in the form of percepts, and outputs in the form of conduct. So long as that is true and all of the reasoning that connects the two could be represented as experimentation upon diagrams which carried no un-pragmatic ontological

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[12] In subsequent paragraphs of this paper, Peirce discusses how the precept (a "seme") can be interpreted by a perceptual judgment (which is a "pheme".). Much of these discussions closely resemble the discussions of perception and abduction in an important section of the 1903 lectures. This may provide further evidence that there is no shapr break between the stretgies employed in 1903 and that which was used in 1905-1906.

[13] The fact that Peirce soon came to identify pragmatist clarifications of concepts with their final or ultimate interpretants may show that his attachment to this throwaway remark was tenmporary. His remark that we may easily fail to see that a geometrical concept (for example) fits a pragmaticist clarification offers more support to this (EP2: chapter 28).
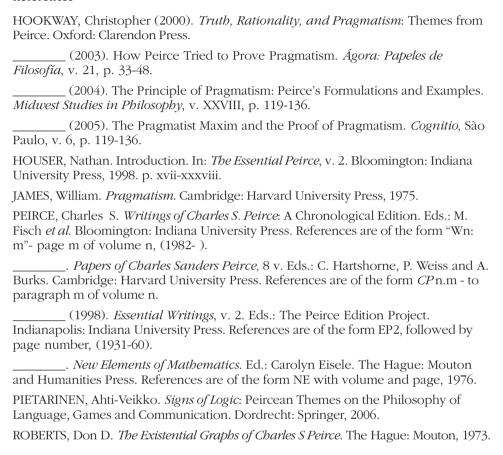
commitments, then perhaps the correctness of pragmaticism can be established. But the proof will depend upon an independent account of the role of percepts in cognition and the nature of the interpretants of our reasoning. This will involve wiork on semeiotic which is independent of the Existential Graphs. The anxieties which Peirce expressed have concerned whether there might be cognition that does not begin with perception (geometrical *intuitus*) or cognition that does not terminate in conduct (perhaps in terminates in understanding or in a sense of community with nature).

As we have seen, Peirce's 1905 paper "Issues of pragmaticism" contains a detailed discussion of critical common-sensism, a thesis which had not much been discussed in connection with pragmatism in earlier writings. Common-sense consists in a body of vague beliefs and habits of inference of which we are very certain. Their vagueness contributes to this certainty, and this helps to ensure that we are likely to reject anything that appears to provide evidence against them When we model our inferential practices using systems of formal logic, common sense beliefs should function as first premises rather than as conclusions derived from identified premises. This is because they are supported by a huge mass of experience rather than being derived from a small number of identifiable premises. This, at least, provides a model for beliefs that will seem to us to be apriori and may possess a sort of immediacy, but which are not in conflict with the pragmatist maxim. It also provides a body of certainties that can be taken for granted when we use the pragmatist maxim to clarify concepts and hypotheses.

Some of the drafts of "The Basis of Pragmatism" (intended as the fourth paper to appear in *The Monist*) contain extended discussions of phaneroscopy and the normative sciences. These investigations can also make sense of a sort of immediacy which is relevant, especially, to the example from the letter to Calderoni. It helps us to see what we can admire unconditionally, what we can approve unconditionally as an end for conduct, and what we can acknowledge unconditionally as an end for inquiry. Although this investigation is not an ordinary inductive one – phaneroscopy is more fundamental than logic and the special – it is grounded in an exploration of the patterns of possible experience. This is compatible with pragmatism yet it enables us to make sense of adopting ends for conduct which are not simply a matter of obtaining information that will serve our practical needs. As Peirce put it elsewhere, we can contribute to the process of creation (CP 4.615, and also see Peirce's "A neglected argument for the reality of God" [EP2: 434-450])

A final conclusion: In the Harvard Lectures on Pragmatism, Peirce emphasised that he sought a "strict proof" of his pragmatism (see HOOKWAY 2005). In the writings from 1907 and later, the search for a proof is also evident (see HOOKWAY 2003). But this paper seems to be concluding that, in the papers appearing in the *Monist* and in the manuscripts towards a further unpublished *Monist* paper, Peirce seems to be aiming for less. I have suggested that the strategy advocated in CP 5.534n, we compare the results of the Existential Graphs and the pragmatist maxim, and, at best, we are likely to obtain weak empirical support for the idea that our practice consistent with Pragmatism. Peirce seems to himself to concede this in that very passage. Indeed, the title of his third paper, "A Prolegomenon for an *apology* for Pragmaticism" suggests he is offering something less than a proof. The interesting question here is now whether Peirce introduced better strategies of proof in subsequent years. And if he did, we can ask if there is a role for the existential graphs in the execution of these strategies?

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