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***Peirce on Grounding the Laws of Logic***

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***Abstract***

This paper is a contribution to the long-standing debate over the coherence of Charles Sanders Peirce’s overall system of philosophy. It approaches that issue through the lens of a contemporary debate over the notion of metaphysical grounding, or more broadly, the nature of metaphysical explanation, employing the laws of logic as a case study. The central question concerns how we can take seriously what we shall call Peirce’s Rule—that nothing can be admitted to be absolutely inexplicable—without being vulnerable to a vicious regress or equally vicious circularity. I first argue that in Peirce’s early work he offers a *quietist* conception of grounding that provides a persuasive and ground-breaking answer to this central question.[[1]](#endnote-1) I then raise a familiar concern, that in Peirce’s later work we find hints of a more metaphysical conception of grounding that seems unable to answer that question and is thus inconsistent with his earlier work. The paper ends with a speculative interpretation of Peirce’s approach to metaphysics and its possible role in grounding logical principles.

*Keywords: Charles Peirce,* *logic, metaphysics, grounding, validity, deduction, induction, quietism.*

*[I]nstead of merely jeering at metaphysics … the pragmaticist extracts from it a precious essence, which will serve to give life and light to cosmology and physics* (CP 5.423, EP 2:339, 1905).

*[N]othing can be admitted to be absolutely inexplicable* (CP 5.318, W 2:243, 1869)[hereafter, *Peirce’s Rule*].

**§1 Introduction**

In his paper “Grounds of Validity of the Laws of Logic” (1869), Peirce attempts to explain the validity of the syllogism (CP 5.321, W 2:244):

*S* is *M*; *M* is *P:*

∴ *S* is *P.*

What could it possibly mean to *explain* the validity of a pattern of inference such as this one?[[2]](#endnote-2) Or more generally—what sort of explanations can be given for the most basic laws and principles on which we rely when we inquire, in philosophy or otherwise? These questions will be my primary focus in what follows.

I argue that in Peirce’s early work, we find a *quietist* answer to these questions (§2). This answer provides an ingenious way to avoid the twin threats of vicious circularity and regress that often beset such bold explanatory endeavors. I then argue that in his later work, Peirce seems to succumb to a problematic temptation—one resurgent in contemporary metaphysics—to seek more robust, metaphysical grounding for all claims, including logical laws (§3). Finally, by considering objections to my interpretation of Peirce, I propose a speculative reading of this conception of metaphysical grounding that may realize Peirce’s hope to rein in the worst excesses of contemporary “ontological” metaphysics.[[3]](#endnote-3)

**§2 Quietist Grounding**

I shall assume that Peirce’s career-long interest in logic was not merely an interest in *shedding light* upon logical methods, laws and argument forms; it was also an interest *justifying* them in some sense (in *what* sense being the issue that concerns us here). Thus Peirce was interested, for example, in methods for the fixation of belief, for making our ideas clear, and for proving the validity of inductive inference and the syllogism.[[4]](#endnote-4) But in each of these cases, Peirce examines not merely how we *do* these things, but at the same time makes arguments for how and why we *should*. Thus, although there is clearly sometimes a difference between *explaining* something and *justifying* it, in this paper I assume that Peirce’s attempts to find grounds for the validity of the laws of logic involve some combination of the two.[[5]](#endnote-5)

For the early Peirce, identifying the *grounds* for the laws of logic was a task for logic itself. So what sort of *logical* grounding could possibly be offered for the validity of the syllogism? That is, what did Peirce consider “grounds” or “grounding” to mean in his early work? And how could the provision of such grounds, supposing it offers some form of justification for the laws in question, avoid the following familiar difficulties?

*Circularity*

In explaining logical laws, it seems one must presuppose some logical laws (those that regulate or govern explanations themselves). It thus seems inevitable that at some point one must presuppose the very logical laws one hopes to explain, and thus that one must beg the question.

*Regress*

If *every* logical law can be explained/grounded, then this leads to a vicious infinite regress, i.e., one logical law being grounded in another *ad infinitum*, without any genuine *ground* being reached.

The structure of “Grounds of Validity” provides an important clue as to Peirce’s conception of grounding. He discusses Locke’s worry that the syllogism “is a *petitio principii*, inasmuch as the conclusion is already implicitly stated in the major premise” (CP 5.328, W 2:247), along with other similar worries.[[6]](#endnote-6) He then attempts to undermine each one in turn. In terms of its structure, then, the paper is wholly devoted to defeating specific challenges to the laws in question. It does not offer any positive argument in favor of the law; instead it offers a series of negative arguments against individual objections. In framing the structure of the paper, Peirce writes:

Let us now consider what can be said against all this, and let us take up the objections which have actually been made to the syllogistic formulæ, beginning with those which are of a general nature and then examining those sophisms which have been pronounced irresolvable by the rules of ordinary logic (CP 5.327, W 2:247).

Thus, it appears from this early work as though Peirce saw the task of grounding a law or principle as one of *defeating specific objections raised against it*, or to use Peircean parlance, as one of defeating putatively *genuine doubts* about the target law’s validity.[[7]](#endnote-7) Indeed, Peirce is very explicit that he does not see his goal as one of ruling out or responding to a generalized skepticism—a skepticism motivated by the mere *possibility* that our logical laws and principles might be invalid or false.

... I am neither addressing absolute sceptics, nor men in any state of fictitious doubt whatever. I require the reader to be candid; and if he becomes convinced of a conclusion, to admit it. There is nothing to prevent a man’s perceiving the force of certain special arguments, although he does not yet know that a certain general law of arguments holds good; for the general rule may hold good in some cases and not in others. A man may reason well without understanding the principles of reasoning, just as he may play billiards well without understanding analytical mechanics. If you, the reader, actually find that my arguments have a convincing force with you, it is a mere pretence to call them illogical (CP 5.319, W 2:243).

The early Peirce thus appears to see no need for grounding of a metaphysical sort. Instead, one need ground logical principles only in the face of (putatively) genuine doubts about their validity, and even then, one’s only task is to eliminate those particular doubts.

This approach is very much in keeping with Peirce’s early anti-Cartesianism (“Let us not pretend to doubt in philosophy what we do not doubt in our hearts”, CP 5.265, W 2:212, 1868) and with his critical common-sensism. In a passage that foreshadows his development of the latter view, Peirce writes:

[A]n inquiry, to have that completely satisfactory result called demonstration, has only to start with propositions perfectly free from all actual doubt. If the premises are not in fact doubted at all, *they cannot be more satisfactory than they are* (CP 5.376, W 3:248, 1877, emphasis added).

Given its non-metaphysical and anti-skeptical character, I shall label this Peirce’s *quietist* conception of grounding. On this view, grounding principles or laws is not something we are by default required to do. Because the laws of logic are principles of common-sense reasoning, free from any actual doubt, there is instead a default presumption in favor of their validity. We therefore have every right to remain *quiet* on the question of their validity, unless/until a genuine doubt comes along (for in the absence of such a doubt “they cannot be more satisfactory than they are”). On many readings of the Peirce of the 1860s and 70s, he would have considered it either pointless or impossible (perhaps both) to try to ground a claim absent a genuine doubt, since the irritation of such doubt is the sole motive for inquiry.[[8]](#endnote-8)I believe this quietist approach to grounding is immune to *Circularity* and *Regress* in the following ways.

Peirce need not worry about *Circularity* because he is not interested in addressing the skeptic. Assuming that what is being challenged is only one *particular* law of logic *at a time*, rather than the laws of logic *in general* and *all at once*, Peirce may rely upon one law in order to ground another, thus potentially avoiding circularity altogether. However, even were there demonstrable circularity (e.g., were doubts raised about every law of logic one at a time, as it were), it would surely be benign rather than vicious; since Peirce is not trying to prove the validity of the syllogism *tout court*, it is not vicious—it does not beg the question—to presuppose its validity.[[9]](#endnote-9)

This is why Peirce’s early approach to grounding is also immune to the worry about *Regress*. If we are entitled to take certain things for granted, then there is no need to provide any *further* logical law or other ground for the validity of the syllogism, such that a regress might ensue. Grounding bottoms-out at the principles we presuppose when we inquire (what Peirce might call the “presuppositions of the logical question”).[[10]](#endnote-10)

**§3 From Quietism to Metaphysics**

This picture of Peirce’s ground-breaking work in epistemology is familiar and popular among many Peirce scholars. It is complicated, however, by Peirce’s attempts to rehabilitate metaphysics. In c.1896, Peirce offers perhaps his most explicit definition of the discipline as he sees it:

Metaphysics consists in the results of the absolute acceptance of logical principles not merely as regulatively valid, but as truths of being. Accordingly, it is to be assumed that the universe has an explanation, the function of which, like that of every logical explanation, is to unify its observed variety. It follows that the root of all being is One; and so far as different subjects have a common character they partake of an identical being (CP 1.487).

To understand this definition, and its relation to the quietist conception of grounding, we first need to introduce Kant’s contrast between laws or principles construed as regulative and construed as constitutive.[[11]](#endnote-11) When a principle is construed as regulative, it is not taken to have any metaphysical grounding, in the sense that there is no further fact or entity in virtue of which it is true or valid. In fact, our belief in a regulative principle has (and can have) no justification over and above its practical necessity or indispensability.[[12]](#endnote-12) Peirce is quite clear both early and late in his career that the laws of logic are regulative, and that as far as he is concerned, there are no constitutive principles.[[13]](#endnote-13) In the 1903 Lowell Lectures, for example, Peirce writes that “every principle of logic is a Regulative Principle and nothing more. Logic has nothing to do with existence” (NEM 3:371).

On this interpretation, the laws of logic, as regulative principles, can be grounded *solely in the quietist sense* outlined in §2. They cannot be grounded metaphysically, since they say “nothing about existence”. They certainly cannot receive grounding of the very robust sort currently in vogue in contemporary metaphysics (something akin to “truth-makers”).[[14]](#endnote-14) A regulative principle is instead one that simply *must* be assumed to be true by anyone wishing to engage in a particular sort of activity (primarily *inquiry*)—no further justification for regulative principles, beyond indispensability, is thought to be either required or possible.[[15]](#endnote-15) Thus, on my initial interpretation, Peirce’s quietist approach to grounding goes along with his view that regulative status for the laws of logic is philosophically adequate and his dismissal of those who think otherwise as purveyors of illegitimate, feigned or fictitious doubts.

Yet the c.1896 passage quoted above seems at the very least in tension with this approach, in that it describes a (perhaps *the*) central task of metaphysics to be to consider the laws of logic as not *merely* regulative, but as something *more*, namely “truths of being”. There are other remarks that also generate a similar tension. Consider Peirce’s notorious claims about indispensability as grounds for belief:

I do not admit that indispensability is any ground of belief. It may be indispensable that I should have $500 in the bank—because I have given checks to that amount. But I have never found that the indispensability directly affected my balance, in the least. … A transcendentalist would claim that it is an indispensable “presupposition” that there is an ascertainable true answer to every intelligible question. I used to talk like that, myself; for when I was a babe in philosophy my bottle was filled from the udders of Kant. But by this time *I have come to want something more substantial* (CP 2.113, 1902, emphasis added).

Other Peirce scholars, such as Tiercelin and Hookway, also regard Peirce as seeking out some kind of additional grounding for the laws of logic through metaphysics. Tiercelin (1997) writes that “one of the functions of Peirce’s evolutionary cosmology is indeed to explain how reality must be, if the regulatory hopes of logic are absolutely true” (p. 36). In saying this she agrees with Hookway (1999) that in his later work Peirce came to see metaphysics as “necessary in order to repay the regulative loans taken out in our logical investigations” (p. 164). But what does it mean for regulative hopes to be “absolutely” true? In what could such “repayment” consist? How do we cash out these metaphors? It appears that the answer, judging by the c.1896 passage, has something to do with *explanation*. But what kind of explanation could metaphysics offer us? And how does that explanation manage to repay those regulative loans without resulting in either *Circularity* or *Regress*?

**§4 Metaphysical Grounding**

To understand what sort of thing a metaphysical explanation of the laws of logic could be, a natural place to turn is to Peirce’s remarks on the nature of explanation in general. Reynolds (2002) suggests the following passage as representative of Peirce’s views on explanation:

[Explanations] supply a proposition which, if it had been known to be true before the phenomenon presented itself, would have rendered that phenomenon predictable, if not with certainty, at least as something very likely to occur. It thus renders that phenomenon rational,—that is, it makes it a logical consequence, necessary or probable (CP 7.192, 1901).[[16]](#endnote-16)

As Reynolds rightly notes, this view “will be immediately recognizable as containing in essence the covering-law model of explanation” (2002, p. 15) later made famous by Hempel and Oppenheim.[[17]](#endnote-17) The schema for explanations associated with this model is as follows:[[18]](#endnote-18)

*C1, C2, ... , Ck* Statements of antecedent conditions

**Explanans**

*L1, L2, ... , Lr* General laws

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*E* Description of the empirical phenomenon **Explanandum**

to be explained

However, if this is how Peirce’s proposed metaphysical explanations of logical laws would have to operate, we immediately encounter a problem. As Reynolds writes:

[O]nce laws themselves are admitted as phenomena to be explained, the very things that we typically turn to for explanations become useless to us, and we exhaust ourselves in the attempt to perform an impossible explanatory regress (ibid., p. 177).

Quite obviously, if logical laws occupy the position of explanandum, then they will have to be explained by appeal to *further* laws (those operative in the explanans). Yet those laws too must presumably be metaphysically grounded, and if that is so, then we have set off upon precisely the *Regress* we sought to avoid. This seems particularly problematic given Peirce’s desire somehow to *justify* or vindicate or legitimize our reliance upon logical laws. For at what point in a regress would it be appropriate to say that the target law has been grounded or legitimized? Wouldn’t any point we pick be arbitrary, because always vulnerable to the demand to retreat yet another step?

Now an obvious and somewhat popular way to block such a regress is by appeal to some sort of *foundationalism*. Peirce could try to argue that some laws are inexplicable or in some way primitive.[[19]](#endnote-19) Yet this seems wholly contrary to the claim I call *Peirce’s Rule*—we are not permitted to consider anything to be *inexplicable* (CP 5.318, W 2:243, 1869), for to do so is to block the road of inquiry, and this is the cardinal intellectual and philosophical sin, as far as Peirce is concerned. Thus, in order to construct some kind of robust, metaphysical conception of grounding of the sort Peirce seems to be hankering for in around 1896, it appears that something else in his system has to give.

Thus, to recap, the key problem I have identified—let us call it *the problem of metaphysical grounding*—is this: if “nothing can be admitted to be absolutely inexplicable” (Peirce’s Rule), and explanation requires the provision of some further fact and/or law (Peirce’s theory of explanation), then it is *always* reasonable to demand some further fact or law (*Regress*) when seeking to ground the laws of logic in “being”. Moreover, even supposing Peirce had some way to halt the regress, he is now once again vulnerable to *Circularity,* as he anticipated in 1869. If he wishes to offer a metaphysical explanation of logical laws, one that somehow serves to legitimize or justify them (thus “repaying the logical loan”), then it will be viciously circular to utilize the laws of logic when explaining (e.g.) the validity of the syllogism. Yet one cannot avoid utilizing those laws, given that explanation itself is a logical process, one involving rational self-control. Thus, it is difficult to avoid the impression that at least some of Peirce’s remarks about metaphysics threaten to re-open the door to the sorts of wholly general, skeptical doubts that he closed so effectively and convincingly in his early work.

**§5 Objections and Replies**

The fact that my reading of Peirce has generated this problem is surely a good reason to think I have gone wrong somewhere in our understanding of Peirce’s remarks about metaphysics. To explore where these errors might lie, I will now consider some specific objections to my reading proposed by fellow scholars. Then (in §6), I build upon these objections and replies a new, speculative interpretation of how Peirce might solve the problem of metaphysical grounding, while still adding something recognizably substantive and metaphysical to the quietist conception that is so prevalent in his early work.

Christie (2014) notes that any interpretation of Peirce’s approach to grounding will have to respect the latter’s firm and career-long commitment to fallibilism. Thus, it cannot be correct to think that Peirce was aiming to provide a form of grounding that would be wholly definitive—that would answer or rule-out skepticism. Thus, a first constraint on any interpretation of Peirce’s metaphysical remarks will be that grounding explanations, whatever they are, will have to be consistent with fallibilism. Of course, one could still have a regress of fallible laws, and I take it their fallibility would not alter the vicious nature of such a regress. Christie might envision, however, that respecting fallibilism will eliminate the problem with *Circularity,* thereby obviating the worry about *Regress.* That is, as noted above, if we can rest content with some sort of single foundation (even if it’s a fallible one) for one or more logical laws, then not only is circularity avoided, but there is no pressure to keep providing further laws or truth-makers such that a regress might ensue.

Even if this is correct, however, I believe that Christie’s reply leaves our central question unanswered, even if it provides a helpful reminder of the shape that answer will have to take. For our central question is: what sort of grounding in “being” does Peirce think we can achieve for logical laws through metaphysics, which adds “something more substantial” to the quietist conception, or to their merely regulative status? Christie’s helpful reminder is that the relevant grounding claim or explanation will be fallible, but it does not tell us anything more about it.

Klein (2014) suggests another way in which I may be exaggerating the scale of Peirce’s ambition for metaphysical explanation. In particular, he suggests I am reading too much into the c.1896 passage in which Peirce talks about “accept[ing] … logical principles … as truths of being” (CP 1.487). He rightly notes that I have made two assumptions that appear unsupported by that passage. I have assumed that Peirce sees it as the task of metaphysics to (1) *uncover* or *identify* some further fact, law or truth-maker, for (2) *each and every* logical law. But Peirce does not provide a quantifier like “all” or “every” in this passage, and his proposal is that metaphysics consists in “the results of accepting” laws of logic as truths of being. Klein writes:

It is one thing absolutely to accept some principles and then to see what the “results” are. It is another thing to try to specify truth-makers for those principles. In fact, checking the results one would expect if the logical principles were true seems like a straightforward application of Peirce’s maxim for achieving the third grade of clarity (2014, p. 6).

This leads Klein to suggest a reading of Peirce’s views on metaphysics that avoids the problem of metaphysical grounding. All Peirce need be saying in such remarks is that metaphysics involves accepting some or all logical laws as truths of being and then, in line with the pragmatic maxim, tracing the consequences of doing so for experience or action.

Klein’s criticisms and proposal are helpful and perceptive. However, I do not believe they answer our question either—they do not entirely eliminate the tension generated by Peirce’s remarks about metaphysics. Let us assume that Klein is right and that all Peirce requires is that we are able to *consider the consequences* of a logical principle’s being, not merely regulative, but a “truth of being”. We can only do this, of course, if we understand what it means for something to be a “truth of being” in the first place. *Regress* and *Circularity* strike me as obstacles even to understanding what this involves, particularly if (as seems most obvious) such truths take the form of a further fact or law that somehow underwrites or legitimizes the relevant logical principle. That is, we still do not know what sort of explanation of logical laws a Peircean metaphysics might deliver or whether it would be capable of justifying or legitimizing those laws without being vulnerable to *Regress* or *Circularity*. Until we can describe that at least schematically, we still cannot make much sense out of Peirce’s vision for metaphysics.

One possibility is to look to Peirce’s remarks about grounding (especially statistical) induction, remarks in which he appeals to his *tychism* (“the doctrine that absolute chance is a factor of the universe”, CP 6.201, 1898), evolution and objective idealism (the theory “that matter is effete mind, inveterate habits becoming physical laws”, CP 6.25, W 8:106, 1891).[[20]](#endnote-20) Peirce writes, for example, that “tychism must give birth to an evolutionary cosmology, in which all the regularities of nature and of mind are regarded as products of growth” (CP 6.102, W 8:135, 1892). Laws of logic are plausibly construed as “regularities of mind”, thus, couldn’t thinking of them as “truths of being” simply involve seeing them as products of tychastic evolution (CP. 6.302, W 8:194, 1893)?

This suggestion seems promising to me, especially in that it takes seriously many of Peirce’s more cryptic remarks in his 1898 lectures, *Reasoning and the Logic of Things*. It may well solve the puzzle in the case of *inductive* laws or principles. However, the flaw in the tychastic approach is that it seems wholly unsuited to grounding *deductive* laws. That is, it seems implausible that the validity of the syllogism could coherently be seen as a product of tychastic evolution. Before I explain why, let me say a little more about how this approach is supposed to work.

Peirce’s tychastic approach to grounding induction is roughly the idea that we can explain natural laws as regularities that evolved gradually by (absolute) chance. The gradual evolution began when the universe was in a state of pure chaos and was triggered by the chance appearance of a tendency towards regularity or habit-taking. Thus, in one of his most notoriously obscure passages on metaphysics, Peirce writes that

in the beginning,—infinitely remote,—there was a chaos of unpersonalized feeling, which being without connection or regularity would properly be without existence. This feeling, sporting here and there in pure arbitrariness, would have started the germ of a generalizing tendency. Its other sportings would be evanescent, but this would have a growing virtue. Thus, the tendency to habit would be started; and from this with the other principles of evolution all the regularities of the universe would be evolved. At any time, however, an element of pure chance survives and will remain until the world becomes an absolutely perfect, rational, and symmetrical system in which mind is at last crystallized in the infinitely distant future. (CP 6.33, W 8:110, 1891)

This story about the universe gradually becoming more determinate, whatever its plausibility, does seem at least *suited* to explaining how regularities like natural laws might come about, so that inductions that rely upon them might prove to be appropriately grounded. Moreover, it is a story that provides us with a clear way to halt any *Regress*, since objective chance is—by its very nature—presumably the one permissible exception to *Peirce’s Rule*.[[21]](#endnote-21) However, laws of nature (law of habit) and laws of logic (laws of mind) are not the same kinds of thing for Peirce.[[22]](#endnote-22) The validity of the syllogism is not a regularity in the habitual behavior of worldly objects. It is also deductive—a necessary, not a contingent, form of reasoning. This is a very significant and problematic disanalogy between deduction and induction, with respect to the question of grounding and evolution. For the claim that the syllogism is a valid form of inference is, if it is true at all, a *necessary* truth, i.e., it is logically impossible for it to be false. Hence its truth cannot be a result of any sort of *change* or evolution, for change requires that at some point it was something *other than* valid, and that is logically impossible. Hence, for my part, I cannot see how the validity of the syllogism, or how deductive logical laws in general, can be grounded in chance via tychastic evolution in the same way Peirce grounds statistical induction.[[23]](#endnote-23)

With the role of Peirce’s metaphysics in grounding logical laws still unclear, in the following sections I set out a speculative account of what I shall call Peircean Grounding. This account aims to do three things:

1. Cash out Hookway’s metaphor of “repayment” of regulative loans
2. Explain the notion of a “truth of being”
3. Explain how a metaphysical explanation might ground the laws of logic without *Circularity* or *Regress*

I tackle (1) and (2) in §6, and (3) in my conclusion (§7).

**§6 Peircean Grounding: A Speculative Account**

As Christie rightly notes, for any Peircean who wishes to respect Peirce’s fallibilism, the grounding of logical principles will have to be a defeasible, rather than a decisive, affair. Yet Hookway’s metaphor of “repayment”—that metaphysics is like repaying a loan we took out when we presupposed the truth of certain logical principles—initially seems at odds with this way of thinking. For when someone takes out a loan in order to start a business, we are inclined to say that their decision to do so will be *vindicated* when the loan (the principal and any interest) is literally repaid to the lender, and the business thus becomes profitable. But there is nothing obviously defeasible about this as a criterion of vindication, either in the loan case or when transposed to the grounding case. That is, at some definite point the amount owed to the lender will reach zero, whereupon the loan is *amortized*. Metaphysics, especially in the form of Peirce’s theory of tychastic evolution, and again bearing in mind Peirce’s fallibilism, cannot be expected to supply anything as decisive as amortization.

However, if we think about the question of “vindication” or grounding more broadly, we may see that the final moment of repayment need not be the salient aspect of Hookway’s metaphor. The business may still fail, and were it to do so, we may, with just cause, find ourselves wanting to say that the decision to take out the initial loan for that purpose was not, after all, the right decision (e.g., on the grounds of opportunity cost—the money could have been used for some other venture with better long-term prospects).

This recalls the parable of the Zen master who observes the people of his village celebrating a young boy’s new horse as a wonderful gift.[[24]](#endnote-24) “We’ll see…” says the Zen master. When the boy falls off the horse and breaks a leg, everyone says the horse is a curse. “We’ll see…” says the Zen master. Then war breaks out, the boy cannot be conscripted because of his injury, and everyone now says the horse was a fortunate gift. “We’ll see…” says the Zen master. The wisdom of adopting a logical principle, and perhaps therefore the legitimacy of the principle itself, must—if we are to be true to Peirce’s contrite and thoroughgoing fallibilism—be eternally subject to revision, just like our judgments about the boy’s new horse.

Notice that the quietist conception of grounding respects this idea. Say we presuppose that some particular question has an answer before we go on to investigate it. Our investigation may bear fruit—we may find an answer that we believe to be correct and which we go on believing in the face of further inquiry or challenges from those who disagree with us. In some sense, our initial faith that there was an answer has been vindicated. But just like in the case of the loan or the boy’s horse, this vindication is not decisive but defeasible. Challenges to our answer, or to the question’s answerability, may yet come along, and it may turn out that we cannot allay the resulting doubts, however long or well we inquire. So the fact that our belief in a principle survives any challenges raised against it is one way in which it can be vindicated in a fallibilist sense. This was precisely the quietist conception of grounding outlined in §1. Our question was, then, what *additional* marks of vindication or grounding can be supplied by some Peircean form of metaphysical explanation—by the attempt to consider the consequences of our logical principles as “truths of being”.

Unfortunately, Peirce says relatively little about what “truths of being” are, yet CP 1.487 suggests that this notion holds the key to understanding the central task of Peircean metaphysics. In fact, Peirce mentions the notion of a truth of being in only one other place in the *Collected Papers*:

The *raison d'être* of a church is to confer upon men a life broader than their narrow personalities, a life rooted in the very truth of being. To do that it must be based upon and refer to a definite and public experience. Fears of hell and hopes of paradise have no such reference; they are matters all sane men confess they know nothing about. Even for the greatest saints, the active motives were not such hopes and fears, but the prospect of leaving behind them fertile seeds of desirable fruits here on earth. It is not the question whether miracles and answers to prayer are abstractly possible. The question is whether they are appreciable constituents of human experiences, worth taking into account in comparison with those great facts of life that no man either doubts or ever will doubt (CP 6.451, c.1895).

The relevance of this passage to our discussion here is not immediately obvious, but we can perhaps speculate based upon context, and based upon some other aspects of Peirce’s views. I believe this speculation leads to a picture that synchronizes well with a number of Peirce’s other ideas, particularly his conceptions of truth and reality.

Prior to this passage, Peirce is considering which motives are the appropriate ones for inquiry. Much as we might expect, he suggests they are open-mindedness and contrite fallibilism, or in Peirce’s more elegant phrasing, “such docility toward facts as shall make us always willing to acknowledge that we are wrong, and anxious to discover that we have been so” (CP 6.450, c.1895). Peirce notes that this “docility” is seldom to be found in the church, where instead “ecclesiastical ambition” and “the odium of priests” reign supreme, and—he implies—pollute the quest for truth. The most that the subsequent quoted passage can tell us, of course, is roughly what Peirce thinks it means to “*confer upon men a life* … rooted in the very truth of being”. But this may nevertheless furnish useful clues about the truths themselves. Thus, in order to confer upon people a life rooted in such truths, the church must

* appeal to something that transcends individuals’ “narrow personalities” (which requires making claims with a sort of *objectivity*, presumably)
* advance claims that are based upon and/or refer to a “definite and public experience” (this perhaps implies that the claims must have *pragmatic meaning*, in the sense defined by the pragmatic maxim)
* appeal to the desire to leave behind us “fertile seeds of desirable fruits”, rather than the baser hopes for salvation or fear of hell (at least some of the consequences of the proposition, constitutive of its pragmatic meaning, must be *desirable* or *valuable*), and
* eschew mere abstract possibility in favor of more concrete “appreciable constituents of human experiences”.

Note that in this last point, Peirce draws a *comparison* between these “appreciable constituents” and “great facts of life that no man either doubts or ever will doubt”. This suggests that truths of being tend to be *dubitable* (in the sense that some people either doubt or will at some point doubt them) and thus in some sense *substantive* (informative, useful, important, etc.).

Thus, we might surmise from these clues that “truths of being” are those that are

1. characteristically objective (“independent of the vagaries of me and you”, perhaps)
2. pragmatically meaningful
3. such that they possess desirable or valuable consequences, and
4. dubitable and thus substantive.

If we now consider an example of a logical principle, we can begin to consider the consequences of regarding it as a truth of being. Take the logical principle that I will call (S), that *the syllogism is a valid form of inference.* Taking (S) to be a truth of being, on this view, would commit us to all of the following:

1. (S) is o*bjective*—it is independent of the vagaries of you and me. This seems a plausible idea to attribute to Peirce, given his opposition to psychologism in logic.[[25]](#endnote-25)
2. (S) *has consequences for experience*, determining for example what sorts of inferences it would be rational to draw. This also seems plausible, especially for those who regard Peirce as some kind of inferentialist about meaning.[[26]](#endnote-26)
3. Some of (S)’s consequences for experience are *desirable or valuable.* This too seems plausible, since syllogistic reasoning is highly intuitive, and if intuitively appealing forms of reasoning are valid, then that seems valuable in a broad sense—it makes our cognitive lives easier.
4. The truth of (S) is *dubitable,* in that people either do or will at some point doubt it, and thus *substantive* (it is genuinely informative or important). This is perhaps the least plausible, since all those who learn basic logical terminology will most likely find it difficult to imagine that (S) could possibly be false, given the strict formal definitions of terms like “syllogism” and “valid”. Logical principles also tend to strike us as empty formalisms, rather than substantive truths.

Note, however, that in contrast to the worries raised in 4, Peirce’s 1869 paper is precisely concerned with doubts that have in fact been raised about the validity of the syllogism. Thus, Peirce may have taken himself to have *demonstrated* that (S) is dubitable—some people actually have raised doubts as to its truth after all. And given that such doubts exist, he may also have thought that in eliminating those doubts, he had discovered something *substantive* about the logical principle.

If this speculative reconstruction were correct, then what Peirce’s more metaphysical conception of grounding adds to the quietist conception are further marks or indicators that our reliance upon a principle is in the (endless) process of being vindicated. Specifically, the indications that a logical principle is metaphysically grounded are

1. persistent *objectivity*—our best evidence or arguments suggest that the principle is true independently of what any person or group of persons happens to think about it
2. persistent *pragmatic meaning*—the principle continues to yield consequences for experience and action; it remains useful to us
3. persistent *pragmatic value*—the various uses of the principle are in some broad sense *good* uses[[27]](#endnote-27), and
4. they remain *dubitable—*doubts can or do still arise from time to time as to the principles’ legitimacy; we must do *substantive* work in order to eliminate them.

How, though, are these further marks and the conception of grounding they constitute worthy of the label “metaphysical”? Certainly not in the traditional sense familiar in contemporary Anglophone philosophy. That is, the conception makes no mention of familiar metaphysical notions like substance, essence, modality, properties, mind-independence, truth-makers, etc. It does not purport to identify any *entity*, concrete or abstract, which serves as something like the referent of or the truth-maker for the relevant logical principle. But this is no doubt because those notions are central to the kind of “ontological metaphysics” that Peirce dismisses as either “meaningless gibberish” or “downright absurd”. It is reasonable to expect that an alternative, truly *pragmatist* approach to metaphysics would rely upon a different suite of concepts. Which concepts, then? And how are they connected to the popular notion that metaphysics is about discovering what is (ultimately or fundamentally) real?

Let us consider each in turn. (1) The concept of objectivity will no doubt seem like the most readily acceptable as metaphysical, since objectivity is widely regarded as a mark of the real. For example, it is a mark of the reality of physical objects that truths about them are robustly objective—they transcend the opinions of any particular person or group of people. Peirce clearly embraces this notion in his various definitions of reality, so thus far it seems reasonable to call the account metaphysical. (2) The idea that a thing *constrains* experience or rational conduct is also a mark of the real. For example, the fact that *my desk is solid* constrains my experience of it in that I cannot see through it, it resists pressure, etc. It also constrains conduct because it would be rational to place objects upon it but irrational to attempt to walk through it. By contrast, it is a mark of the *un*reality of ether that it in no way constrains my (or anyone else’s) experiences or conduct. (3) The idea that these constraints are *valuable* to us is rather harder to sell as a metaphysical notion. But we have good reason to think it would seem natural to Peirce once we recall that in his classification of the sciences, he claims that metaphysics is subordinate to ethics (CP 1.180ff., 1903). This idea has been further developed by Pihlström (2009), who draws upon the work of classical and neo-pragmatists to argue that a distinctively pragmatist approach to metaphysics must embrace the idea that ontology is *grounded* in ethics.[[28]](#endnote-28) Thus, the idea that a logical principle is metaphysically grounded only when and while it is ethically valuable may prove to be defensible, if something like Pihlström’s view is.

This brings us, finally, to (4) the notion that grounded principles are dubitable and thus substantive. Not only is this quite obviously an epistemological issue, it seems rather counter-intuitive. If the goal of grounding a logical principle is to establish its legitimacy (in some sense), and/or to tie it to something *real*, then shouldn’t the outcome be exactly the opposite—the elimination or at least mitigation of doubt? (Compare the sailor who relies upon celestial navigation, and wants some assurance of its reliability, discovering the relevant astronomical facts about the earth’s rotation relative to various celestial bodies—we would presumably expect this to bolster the sailor’s confidence, not shake it).

First let me suggest why this mark of Peircean Grounding needn’t be counter-intuitive. To do this we need to recall our starting point. We are approaching the issue of metaphysical grounding not from the perspective of contemporary metaphysics or epistemology (where the search for grounding might be driven by skeptical doubt or by purely theoretical considerations). We are approaching grounding from the quietist perspective we find in the early Peirce, and following in Peirce’s footsteps as he attempts to add “something more substantial” to that approach. According to that perspective, logical principles are *regulative assumptions*, and as I have argued elsewhere, one of the hallmarks of a regulative assumption is that it is *ceteris paribus* indubitable.[[29]](#endnote-29) French explains why this should be, while referencing Kant, originator of the distinction between a regulative and a constitutive principle:

A constitutive proposition describes the sensible world. A regulative proposition does not. A regulative proposition *prescribes*. It postulates what we ought to do, or how we ought to think. (A509-B537)

Regulative propositions cannot and do not tell us anything about objects. To regard unverifiable propositions as descriptive is always a mistake. (A510-B538) (1967, p. 624)

This leads us to a possible explanation of why grounded principles—truths of being—should be dubitable, rather than the reverse. When construed as merely regulative, logical principles are indubitable because they cannot be verified or falsified—they merely prescribe a course of action or a way of thinking. In order to ground those principles in a metaphysical sense, we must (according to Peirce) consider what would follow if they were truths of being. On my speculative reading of Peirce’s notion of a “truth of being”, this involves applying the four criteria. If (4) is indeed one of those criteria, then Peircean Grounding requires treating them as dubitable, and therefore substantive (rather than either trivial or otherwise immune to error).

How exactly might a logical principle like (S) be dubitable? Clearly, it is important we not interpret Peirce as reinstating or making use of the notion of a Kantian constitutive principle, since there is good evidence he rejected that notion wholesale. Thus I believe it would be a mistake to interpret Peirce as proposing that we consider logical principles as *describing reality* (at least in the sense in which traditional metaphysics construes that expression—naming or picturing existent particulars, properties, etc.). Instead, I believe Peirce is enjoining us to consider the possibility that the other three metaphysical criteria may not be satisfied. Thus, to entertain doubt about a logical principle is to entertain the following possibilities: that it may not be (1) objective or (2) pragmatically meaningful, or that (3) its uses may be adverse or deleterious in some way. If one can argue that each of these criteria is satisfied (and so long as these arguments endure and sustain our belief in them), then the relevant logical principles will have been grounded, in the Peircean sense I am sketching here.

**§7 Conclusion**

In summary, I have offered a speculative sketch of Peircean Grounding. This approach begins from the quietist perspective I endorsed earlier and adds “something more substantial” in the form of four metaphysical criteria (where the term “metaphysical” takes on a distinctively pragmatist or practical meaning). These four criteria tell us what is involved in regarding logical principles as truths of being, and they provide additional marks or indicators that a logical principle is grounded, beyond the quietist criterion that doubts about them would eventually be defeated by further inquiry or argument.

We now turn, finally, to the question of whether this sketch offers us a solution to the problem of metaphysical grounding. The problem arose because of an apparent tension between various elements of Peirce’s philosophical system: if “nothing can be admitted to be absolutely inexplicable” (*Peirce’s Rule*), and if explanation in the case of grounding logical laws requires the provision of some further fact and/or law that in some way justifies or vindicates them (Peirce’s theory of explanation), then it is always reasonable to demand some further fact or law (generating the vicious *Regress*). Any attempt to halt *Regress* appeared likely to generate *Circularity* and to be at odds with Peirce’s anti-Cartesianism and anti-foundationalism. Does Peircean grounding avoid or resolve this tension?

I believe the sketch I have offered does avoid these difficulties, but at some interpretive cost. Specifically, Peircean Grounding is not consistent with what we took to be Peirce’s theory of explanation—the best we can say is that it is a *special form* of explanation, one perhaps unique to the context of metaphysics or of explaining logical principles. This uniqueness is vital to avoiding *Regress.* That is, it is only because employing the notion of a truth of being and its four criteria does notinvolve identifying some further law that grounds a deductive logical principle that we avoid *Regress* (note that we avoid *Circularity* simply by honoring Peirce’s fallibilism, and thus remaining consistent with Peirce’s rejection of skeptical doubt).

There is *some* sort of precedent for thinking that logical laws are somehow a special case when it comes to their explanation. For as we saw, in the case of grounding induction (assuming we take seriously tychastic evolution and objective idealism), Peirce also avoided *Regress* for special reasons. Laws of nature are ultimately grounded in the operation of objective chance in the absence of all regularity (chaos). Chance and chaos seem to be special for Peirce—they alone do not require further explanation, hence *Regress* is avoided.

Thus, my interpretation requires us to say that Peirce must have thought that metaphysical explanation is a special, perhaps unique kind of explanation. Yet so far as I know there is no clear or definitive textual evidence that Peirce actually thought this. It is certainly a view with contemporary advocates and precedents, though the standard conception of metaphysical explanation is in many ways radically different than Peircean Grounding.[[30]](#endnote-30)

Even without textual evidence, is the view consistent with Peirce’s overall metaphysical system? This is not a question that can receive a satisfactory answer here. Thus, I hope this paper might stimulate other scholars to pursue a greater understanding of the nature and role of a genuinely Peircean and pragmatist metaphysics in “giving life and light to cosmology and physics”, and one that incorporates its vital role in grounding logical principles.

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1. **NOTES**

   The pun is intentional—I believe the quietist approach of the early Peirce ‘breaks’ or eliminates the motivation for grounding of the metaphysical sort currently in vogue. [↑](#endnote-ref-1)
2. One rather obvious answer may leap to mind—such a pattern is valid precisely because *if the premises are true, then the conclusion must also be true* (irrespective of the content of S, M and P). A moment’s reflection reveals that this, however, is not an *explanation* at all. Instead it is merely a more detailed statement of the explanandum. Construed as an explanation this answer would be a case of the *virtus dormitiva* (see Molière 2004). [↑](#endnote-ref-2)
3. It is important to bear in mind that in “What Pragmatism Is”, Peirce writes that “almost every proposition of ontological metaphysics is either meaningless gibberish—one word being defined by other words, and they by still others, without any real conception ever being reached—or else is downright absurd” (CP 5.423, EP 2:338, 1905). [↑](#endnote-ref-3)
4. See “Grounds of Validity of the Laws of Logic”, CP 5.318-357, W 2:242-272, 1869; “The Fixation of Belief”, CP 5.358-387, W 3:242-257, 1877; “How to Make Our Ideas Clear”, CP 5.388-410, W 3:257-276, 1878; and “The Probability of Induction”, CP 2.669-693, W 3:290-305, 1878. [↑](#endnote-ref-4)
5. It is not clear to me that on Peirce’s understanding of explanation (which inherently involves logical consequence), any distinction between explanation and justification is tenable. I do not defend or rely upon this view here. I merely take it for granted that in his logical investigations, Peirce was concerned to achieve both. [↑](#endnote-ref-5)
6. See Locke (1690/2008), book 4, chapter 17, section 4. [↑](#endnote-ref-6)
7. Regarding Peirce’s distinction between belief and doubt, see CP 5.370-373, W 3:247, 1877. Regarding his insistence upon beginning philosophical inquiry with *real*, rather than feigned, doubt, see CP 5.264-265, W 2:211-212, 1868; see also Hookway (2000), chapter 8. [↑](#endnote-ref-7)
8. See “The Fixation of Belief”. On the use of this as an argument against Descartes’s method of doubt, see Haack (1994). [↑](#endnote-ref-8)
9. This anticipates a point also made, albeit much later, by Michael Dummett (1978) via his distinction between *suasive* and *explanatory* arguments. See especially p. 296. [↑](#endnote-ref-9)
10. See “The Fixation of Belief”, e.g., CP 5.369, W 3:246, 1877. [↑](#endnote-ref-10)
11. See Howat(2013)**.** [↑](#endnote-ref-11)
12. See, e.g., French (1967) and O’Shea (forthcoming). [↑](#endnote-ref-12)
13. “Kant’s distinction of regulative and constitutive principles is unsound” (CP 3.215, W 4:193, 1880). [↑](#endnote-ref-13)
14. Note that this also accords with Peirce’s classification of the sciences, wherein metaphysics is dependent upon or subordinate to logic. [↑](#endnote-ref-14)
15. I take this interpretation of Kantian regulative principles in part from Bennett (1974). See especially p. 271. For a far more nuanced account, see O’Shea (forthcoming). See also Howat (2013). [↑](#endnote-ref-15)
16. Note how strongly this passage suggests that for Peirce, explanations are *arguments*, either deductive or inductive, as per my initial assumption. [↑](#endnote-ref-16)
17. Peirce writes: “explanation consists in bringing things under general laws or under natural classes” (CP 5.289, W 2:226, 1868). [↑](#endnote-ref-17)
18. Hempel and Oppenheim (1948), p. 138. [↑](#endnote-ref-18)
19. Hookway canvasses this as a possibility, deploying the notion that there are “acritical common-sense certainties” (2000, p. 190), which are not themselves the products of inquiry, and thus are not reliant upon the legitimacy of the laws they purport to ground. [↑](#endnote-ref-19)
20. I would like to thank an anonymous referee for making this suggestion. [↑](#endnote-ref-20)
21. Peirce explicitly says that regularity or uniformity is (“*par excellence*”) the thing we must explain. This suggests that if the original state of the universe was one of utter chaos or absence of regularity, then by Peirce’s lights, it does not need to be explained (see, e.g., CP 6.12, W 8:101, 1891). [↑](#endnote-ref-21)
22. I am grateful to several commentators on this paper and an anonymous referee for insisting upon this point. [↑](#endnote-ref-22)
23. An anonymous referee points out that Peirce does suggest in his 1898 Cambridge Conferences Lectures that the Platonic world would have to be subject to evolution just as much as the physical world. I do not see how this suggestion could possibly be right for the reasons I just articulated (though there is some relevant material around CP 6.209, 1898). Nevertheless, I remain open to the idea that there is a better interpretation of Peirce’s views that might preserve this rather bizarre-sounding claim. [↑](#endnote-ref-23)
24. A story I first encountered in the film *Charlie Wilson’s War,* and which is recounted by an anonymous contributor to the *New York Times* here: *http://www.nytimes.com/2008/01/21/opinion/21iht-edmovie.1.9374975.html* [↑](#endnote-ref-24)
25. See especially Kasser (1999). [↑](#endnote-ref-25)
26. See, e.g., Legg (2008). [↑](#endnote-ref-26)
27. Here we might think of James’s similar remarks, not about pragmatic meaning, but about truth: “*The true is the name of whatever proves itself to be good in the way of belief and good, too, for definite, assignable reasons*” (1908, p. 76). And also: “The truth of an idea is not a stagnant property inherent in it. Truth *happens* to an idea. It *becomes* true, is *made* true by events. Its verity *is* in fact an event, a process” (ibid., p. 201). [↑](#endnote-ref-27)
28. “[I]t will be argued that, from a pragmatist perspective, metaphysics must be inextricably entangled with *ethics*—at least when ethics itself is understood broadly” (Pihlström 2009, p. vii). [↑](#endnote-ref-28)
29. Howat (2013). [↑](#endnote-ref-29)
30. For a particularly influential and currently popular conception of what metaphysical explanation is, see Schaffer (2009). [↑](#endnote-ref-30)