A less simplistic metaphysics: Peirce's layered theory of meaning as a layered theory of being

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Abstract. This article builds on C. S. Peirce's suggestive blueprint for an inclusive outlook that grants reality to his three categories. Moving away from the usual focus on (contentious) cosmological forces, I use a modal principle to partition various ontological layers: regular sign-action (like coded language) subsumes actual sign-action (like here-and-now events) which in turn subsumes possible sign-action (like qualities related to whatever would be similar to them). Once we realize that the triadic sign's components are each answerable to this asymmetric subsumption, we obtain the means to track at which level of complexity semiosis finds itself, in a given case. Since the bulk of such a "trinitarian" metaphysics would be devoted to countenancing uninterpreted phenomena, I argue that current misgivings about sign-based ontologies are largely misplaced.

Keywords: semiotics, metaphysics, Charles Peirce, modality, possibility, actuality, generality, trinitarianism, prescission, taxonomy, relations, Karl Popper, inference

> The student of Aristotle usually begins with the Categories; and the first thing that strikes him is the author's unconsciousness of any distinction between grammar and metaphysics, between modes of signifying and modes of being. When he comes to the *metaphysical* books, he finds that this is not so much an oversight as an assumed axiom [...]. (CP 2.384)

> I would say, actually it is fine to derive one's metaphysics from one's semantics – just please, please get a less simplistic semantics! (Legg 2013: 16)

1. Introduction

There is a sense in which one can use signs without granting their reality, just as one can breathe without accepting the reality of air. But, if one does not endorse a metaphysical outlook explicitly, an uncritical view will simply fill the void (Lowe 2014: 128–130). Unfortunately, despite this inevitability, no one really knows how to adjudicate metaphysical disagreements. Parsimony – the aspiration to posit as little as possible – is a widely-cited desideratum, but it is unclear what counts as more parsimonious. David Chalmers (2013: 18), for instance, writes that "[a]ccording to Russellian monism, all conscious experience is grounded in structure plus quiddities, but not in structure alone". I happen to agree with this. Yet, if there is a commitment to something "plus" something else, how can this be "monism"?

One method, prominent in analytic metaphysics since at least Quine (2001[1953]: 1–19), consists in looking at what (some) people talk about, then cataloguing what has to exist in order for that talk to make sense. Of course, we have to begin somewhere, but why should we begin with language? And which language should we pick, exactly? Quine and his followers held that "if we could imagine our science collated and regularized into a single theory expressed in first-order logic, its bound variables would have values" (Legg 2013: 3) that would pick out what is real. Like Legg, I find this overly simplistic. The strategy will certainly succeed in capturing some of "what there is", but I see no reason why it would capture all there is.

With Charles S. Peirce (2015: 681), I am compelled to recognize that "[t]here are countless Objects of Consciousness that words cannot express". Verbal descriptions, for instance, arguably fail to convey fully what it is like to experience an orgasm (Champagne in press b). So, instead of looking at language for my clue, I propose to derive a metaphysical outlook from sign-action in the broadest sense.

Like most Peircean semioticians, I think we can analyse signs into three discernible parts. Pursuant with this, I will explore the idea that reality is comprised of three stuffs: lone quality, causal impacts between two things, and triadic relations (that have the power to beget more of themselves). Following Bradley (2009), I propose to call this trinitarianism. On a trinitarian ontology, everything is made of one or more of the sign's three parts.[1] I suppose I could say that there is only one thing in the world, semiosis, and that it has three "properties", namely Firstness, Secondness, and Thirdness. However, there may be genuine ontological commitments involved, and I want to see what happens when those are embraced head-on. My hunch is that, when it is presented in a charitable light, a sign-based worldview turns out not to be spooky at all.

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[1]   I could have also named this view 'semiotic trinitarianism', to distinguish it from religious versions (like Polkinghorne 2003; Robinson 2010).

My effort can be glossed a number of ways. It is partly pedagogical: I am out to explain some key Peircean ideas to an audience that may not have a prior familiarity with (or sympathy towards) those ideas. It is partly promotional: I believe that mainstream debates in metaphysics would benefit from considering semiotic theory. It is partly corrective: I find that discussions in semiotics sometimes carelessly endorse (or flirt with) misguided ideas, so I want to do my best to flag some notable dead-ends. It is partly synthetic: I have been thinking about these issues for a while now, so I want to pause and unite my ideas in a comprehensive worldview. One thing my effort is not, however, is exegetical: I am not out to woo or outdo established Peirce scholarship. I am schooled in the relevant literature and stand by everything I say, but there are plenty of sources that will satisfy exegetical cravings better than this article.

Here is how I intend to proceed. I will begin by retracing the motivation behind the endorsement of three stuffs (Section 2). I will then contrast this triple commitment with Karl Popper's three "worlds" (Section 3). Instead of positing worlds, I will use a modal principle to partition different layers: regular sign-action subsumes actual sign-action which in turn subsumes possible sign-action (Section 4). As we will see, these basic layers can be recursively compounded in a way that does justice to a whole range of experiences. After breaking the action of signs down into such discernible steps, I will look at salient examples (Section 5). I will discuss the pros and cons of ranking signs in an ascending or descending order (Section 6). Finally, I will draw on the foregoing to show how the bulk of a Peirce-inspired metaphysics is devoted to countenancing un-interpreted phenomena (Section 7).

2. Why three stuffs?

My second epigraph calls for a less simplistic "semantics". Semantics is sometimes defined (when it is defined at all) as the study of meaning apart from use (see Palmer 1997: 1–8). Linguists have been trying to do semantics since at least Michel Bréal's 1897 *Essai de sémantique*. In philosophy, the logician Alfred Tarski used the term in a 1936 paper titled "*Grundlegung der wissenschaftlichen Semantik*". Two years later, Charles W. Morris published his influential *Foundations of the Theory of Signs* (reprinted in Morris 1971: 13–71). In that short paper, Morris cut semiotics into three branches: "semantics" (studying vehicle-to-object relations), "syntactics" (studying vehicle-to-vehicle relations), and "pragmatics" (studying vehicle-to-interpreter relations).

Rudolf Carnap, who was influenced by both Morris and Tarski, was among the first analytic philosophers to describe prominently his investigations as "semantic" (see Hanzel 2009). Yet this aspiration to study one relation in isolation is highly questionable. Indeed, one could argue that vehicle-to-interpreter relations matter only

because interpreters take it that there are vehicle-to-object relations (what interest could any interpreter possibly have in a mere vehicle?). Likewise, one can wonder how, without vehicle-to-interpreter relations and vehicle-to-object relations, one can be in any position to distinguish between vehicle-to-vehicle and mere thing-to-thing relations. What, for example, distinguishes a string of beads in an abacus from a string of pearls in a necklace? It seems that, without "semantic" value and "pragmatic" use, we have no justifiable basis to think that one string (the abacus) has syntax while the other (the pearl necklace) lacks syntax.

Despite these problems, the isolated study of semantics is now so entrenched in philosophy and linguistics that reintroducing the unified notion of semiosis is considered a radical move (see Rellstab 2010). Analytic philosophers of language have artificially divided a phenomenon into simpler parts, but are now unable to find their way back. To his credit, Morris (1971: 23) warned that "the various dimensions" picked out by his trivium of disciplines "are only aspects of a unitary process". Popularity, however, has a way of putting statements on a severe diet.

Morris claimed to be continuing the work of Peirce (Rochberg-Halton, McMurtrey 1983), but "[t]he term [semantics] is not one found anywhere in Peirce; for pragmaticism, the field it is supposed to demarcate, simply *does not* and *cannot* exist" (Tejera 1991: 151). This impossibility stems from the fact that, unlike the branches proposed by Morris, signs are three-term relations that cannot be reduced to conjunctions of pairs. As a logician trained in framing things in the broadest terms possible, Peirce (CP 1.339) showed how any sign is something that stands *for* something *to* something – regardless of what might fill these place-holders on a given occasion.[2] I will refine this considerably in subsequent sections. For now, what matters is that this triadic model imposes a very strong constraint: *delete any component in the triad and the action proper to signs ceases.*

To see why, imagine that a person and a text are placed near each other, so that the person could in principle view the text. How confident would we be that the person read what was written if the person in question had no reaction whatsoever to the exposure? I mean this literally: no utterance, no eye tracking, no increased palm moisture, and no altered brain state – no alteration at all. With no effect, how would we regard the claim "The person has interpreted the sign-vehicle before her"? It seems that, under such circumstances, such a claim would be completely unwarranted. At minimum, then, interpretation demands that *something* happen. It does not have to be much; a quick glance in the direction of the text, for example, would give the claim of interpretation renewed weight/plausibility. Still, if bringing two things together

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2   Additionally, Peirce argued that all complex relations can be reduced to three-term relations. His demonstrations, which belong to a branch of geometry called topology, are laid out in Peirce 1998: 364.

results in nothing more than bringing together two things, we have no reason to gloss the proximity as interpretive.[3]

Peirce uses 'interpretant' to name the effect produced when a sign-vehicle is linked to an object. 'Interpretant' is a rigorously defined term-of-art in semiotic theory, so it should not be confused with the lay notion of interpreter. Just as we replace the lay term 'sign' by the more appropriate term 'sign-vehicle' to pick out a material thing based on the semiotic role it plays, so we replace 'interpreter' by 'interpretant' when we want to pick out the semiotic role it plays (different roles, different names). Nevertheless, as shown by the common etymology, the two notions are not completely unrelated:

> Now, the conception that Peirce takes to be the ordinary, unreflected idea of sign and sign-process is that the activity of signs [...] involves an utterer and an interpreter. Such a view may seem to be almost opposite to Peirce's generalized conceptions of sign and semiosis. But, in fact, Peirce considers this crude idea to contain the seed of truth. [...] Peirce's aim is to abstract those ingredients of utterer and interpreter that are vital to the being of a sign. (Bergman 2003: 11)

If we ask what gives interpreters their unique ability to bring about meaningful relations, we have a lot of possible explanations: it might be because of their livers, or their brains, or the fact that their bodies contain sodium. Yet, such answers are about as promising as thinking that ink or paint is what makes a sign-vehicle capable of signifying. In either case, a functional definition is in order. Hence, looking at everyday interpreters, Peirce was able to discern a very specific relation: "Such a mediating representation may be termed an interpretant, because it fulfils the *office* of an interpreter, *who says that a foreigner says the same thing which he himself says*" (Peirce 1992: 5).

Consider a United Nations interpreter paid to mediate between French and English diplomats. This bilingual interpreter is a regular person, liver and all. Yet, the semiotic function that she fulfils is not visible in the same sense. To be an interpreter, one must relate things. In the present case, a French diplomat speaks, then the bilingual interpreter, having listened, speaks in English. Of course, nothing prevents the U. N. worker from temporarily suspending her vocation and saying whatever she wants to her English interlocutor. Were she to do this, though, she would no longer be relating

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[3]   Might the person in my example eventually react to the text in some fashion? Certainly; in that sense, the situation allows for a host of potential responses. This potential, however, is confirmed only by acts. If those acts are regular/habitual, then all the better. In fact, for an occurrence to count as linguistic, the reactions have to be regular/habitual. One cannot be credited with knowing Japanese just because on a single occasion one randomly uttered a Japanese-sounding word (which is why, as we shall later see, Peircean semiotics requires a symbol to have a regular type as its vehicle).

her utterances to the French utterances in a way that entitle the former to count as interpretations of the latter. Hence, a specific relation must be satisfied: the interpreter conveyed to the English diplomat what the French diplomat herself conveyed, thereby giving the English a mediated access to the French that the English would not have otherwise had.

Although the role of the interpretant is similar to that of the interpreter who acts as a "middle-man" between two parties (Savan 1987: 43–48), it is being in the middle that counts, not being a man. As such, "the notion of sign [...] has been constructed as conceptually independent of particular situations" (Bouissac 2000: 19). This lets semiotics study a host of situations (Deely *et al.* 1986). If, for example, a squid – call it squid A – sees an approaching predator and thereby secretes ink, this ink can in turn act as a sign-vehicle to another squid B, whose interpretant will also be to flee. Add another squid C which flees upon seeing the flight of squid B and the flight that was an interpretant in the original triad now counts as a sign-vehicle in the newer triad. The relation is the same as the U. N. diplomat case: B conveyed to C what A itself conveyed, thereby giving C a mediated access to A that C would not have otherwise had. Peirce's categories of First, Second, and Third are meant to help us track the role-switching that allows information to be passed along in this relay race (that can pause but can never stop, once and for all).[4]

The familiar secretion which prompts an about face in squid B cannot by itself account for that squid's aversive response. Studying the chemical properties of the sign-vehicle won't help; we must recognize that the ink acted as a sign. If one refuses to see that squid B flees a predator (and not a cloud of ink), one is going to miss out on what is really going on. Squid B may never see the predator itself – that is the whole point (and evolutionary utility) of an anticipatory flight. Yet, working together, these signs at sea can connect distant objects, "[f]or to be in a relation to X, and to be in a relation to a relation to X, mean the same thing" (Peirce, MS 611, quoted in Stjernfelt 2014: 87).[5] The static idea of 'semantics' occludes these important features.

John Dewey studied briefly under Peirce at Johns Hopkins University. Compared with Morris, Dewey had a far clearer grasp of what the founder of pragmatism meant by meaning, so the passages where Dewey corrected Morris are instructive:

> Peirce uniformly holds (1) that there is no such thing as a sign in isolation, every sign being a constituent of a sequential set of signs, so that apart from membership in this set, a thing has no meaning – or is *not* a sign; and (2) that in the sequential movement of signs thus ordered, the meaning of the earlier ones in the series

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4   For another example using marmots, sunflowers, and who knows what else, see Champagne 2009b: 159.

5   Smartphones, for example, put us in touch with one another across vast distances partly because they go from, say, English to strings of 0s and 1s and back to English.

is provided by or constituted by the later ones as their interpretants, until a conclusion (*logical* as a matter of course) is reached. Indeed, Peirce adheres so consistently to this view that he says, more than once, that signs, *as such,* form an infinite series, so that no conclusion of reasoning is forever final, being inherently open to having its meaning modified by further signs. (Dewey 1946: 88)[6]

Scholars and scientists often sense that something like semiosis happens, but they sometimes couch their intuitions in anthropomorphic analogies that invite official disavowals. The neuroscientist Bernard Baars, for example, writes that "[i]f we could zoom in on one individual neuron [...] we would see the nerve cell *communicating* frantically to its neighbors about one thousand times per second [...]" (Baars 1997: 18; emphasis added). Frederik Stjernfelt (in Emmeche *et al.* 2008: 7) observes that, promissory notes aside, such terminology is never reduced or eliminated. A trinitarian would argue that such reductions or eliminations are never carried out because, fundamentally, the action of signs is a genuine part of reality.

If, say, neuron A impinges on neuron B, and neuron B impinges on neuron C, then no matter how we unpack the impingement, we cannot credit these two events with any kind of informational transfer unless neuron C is affected in a way that makes it relate to neuron A through the intermediary of neuron B.[7] In this sense, we have action at a distance. This is what Peirce (1998: 411) meant by semiosis, namely "an action, or influence, which is, or involves, a cooperation of *three* subjects, such as a sign, its object, and its interpretant, this tri-relative influence not being in any way resolvable into actions between pairs".[8]

Like rubber-bands layered atop one another until they form a ball-shape, signs can be added to signs even though the inner-most rubber band that started it all is coiled unto nothing but itself. Indeed, "as any teacher can well attest, the *object communicated* need by no means have a physical presence to the communicants even when and if it has a physical presence elsewhere, for it need not have or have ever had a physical presence at all [...]" (Deely 2015: 10). This is what happens when an error or a fiction spreads. If, for example, squid A would have secreted its ink merely because of a malfunctioning organ, squid B would still have fled, even in the absence of a real predator, and that flight would still have made squid C flee too. Hence,

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6   For a compact justification of this view, see Peirce 1992: 11–27.

7   Fred Dretske (1981) has done a great job showing how information theory can be used to craft a persuasive account. Unfortunately, Dretske (1995) also thinks we should try to "naturalize" the mind in a way that makes the idea of qualitative experience dubious (see Bailey 2005). I do not see why this incredulity should follow. On the contrary, as I will argue in Section 5, I think the triadic account implies a qualitative limit case where A stands for A to A.

8   Contrast this with the account of (efficient) causality given in Bunge 2008.

erroneous or not, the basic structure of meaning propagation stays the same.[9] Analytic philosophers tend to fixate on truth, reducing all *in absentia* discourse to moments of direct "acquaintance" (Russell 1910–1911), but the agnosticism or alethic neutrality of semiosis is what enables coral reefs of the imagination like literature. We write/read something we know to be untrue, yet pass it along nonetheless.

Because that action of signs traverses nature and culture, the study of signs permits/ demands a unified view of the natural and social sciences (Deely 2009b; Sebeok 2000). A prevalent picture, however, asks us to stack all disciplines according to the size or scale of their subject matters: cultural phenomena are supposed to be reducible to neurological facts, which are supposed to be reducible to chemical and, eventually, to physical facts. This vertical arrangement, canonically expressed by Oppenheim and Putnam (1958: 9), has mired many disciplines in physics-envy and neuromania. However, I reject the dubious metaphysical thesis that, the smaller a thing is, the more real it is. So, when I advocate a "layered" ontology, I do not mean this. A researcher may spend her time looking at microscopes (e.g., El-Hani *et al.* 2006) or shopping malls (e.g., Danesi 2006), but such personal predilections do not mean that a given venue is where "real" signs reside.

Despite the continued prevalence of reductionism – even in semiotics[10] – the fact is that "over more than forty years since its publication, the specific extrapolations offered by [Oppenheim and Putnam] seem to have been, without exception, mistaken" (Ross 2005: 168). Having changed his views in light of these failings, Putnam (2015: 313) is now trying to rehabilitate "philosophical positions that are 'naturalist' in the sense [...]

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9   Jesper Hoffmeyer (2014: 14) has recently argued that, because de-cerebrated rats can still lift their hind leg when approaching a spot where they had previously received electric shocks, the brain is not needed for sign-action to take place. As a point about the stinging object not needing to be present, I find this argument persuasive. Now, I presume that a headless rat is a dead rat. Since Hoffmeyer is granting that semiosis can occur even without life, he now needs to tell us what, if anything, distinguishes a dead rat's convulsing body from, say, an elastic material that has become tougher as a result of prior kneading. Peirce embraced this with his broad notion of 'habit', but I doubt Hoffmeyer would follow him. Hoffmeyer might respond that some cells in a dead rat are still "alive", but letting semiosis make do without brains or regular organismic life is a big concession (bigger, I think, than Hoffmeyer currently realizes).

10   The manifesto by Anderson *et al.* (1984) struggles against the centripetal pull of this picture while undermining that very struggle with prefixes like "microsemiotic", "macrosemiotic", "quantumsemiotic", and "megasemiotic" (Anderson *et al.* 1984: 13). Luckily, none of those neologisms have caught on – although one recent paper dazzled by scale managed to confuse the natural sign of boiling water for an alleged "chemiosemiosis" (see the critique in Champagne 2013b). I find it absurd to think that, were I to shrink to a minuscule size and write graffiti on a cell wall, my antics would suddenly become the province of "biosemioticians" instead of "sociosemioticians" (and that, were I to shrink even further, the baton would pass to "chemiosemioticians").

of rejecting all appeals to supernatural entities in philosophy while simultaneously rejecting the positivist demand that aesthetic and ethical concepts be reduced to the concepts of the natural sciences or expecting that they could, or eventually will be, so reduced". I do not cling to (or wish to rescue) the label "naturalism", but I join Putnam in this important task.[11]

Since I want to acknowledge the very signs I rely on in order to defend my view of the world, I propose to countenance semiotic triads – plus all the simpler (dyadic and monadic) states that they subsume.

3. Peirce's three categories versus Popper's three "worlds"

Maybe I lack erudition, but I know of only one major contemporary thinker besides Peirce who countenanced three stuffs, and that is Karl Popper. Popper is mainly known for the view that science advances by means of conjectures and refutations (Popper 2002[1963]), but he eventually felt it necessary to clarify the ontology that makes this cut-and-parry binding and predictive. Although Popper did not read Peirce prior to 1966 (Chauviré 2005: 209), the subsequent effects of his reading quickly became noticeable,[12] so the case can be made that his three worlds were loosely inspired by the Peircean categories. Popper (1955) was concerned with the mainstream mind-body problem, but given that "we find in Peirce no traditional philosophical arrangement that creates a mind-body problem" (Pietarinen 2006: 76), something was lost in translation. Even so, the ideas of Popper can serve as a convenient foil to introduce the distinctive ontological commitments of trinitarianism.

As a philosopher of science, Popper did not want to deny the mind-independent existence of matter. He did, however, think that an exclusively material world would be insufficient to house consciousness and knowledge. In short, Popper wanted to put scientists in his scientific worldview. He thus strove to account for what he called "knowledge in the objective sense, which consists of the logical content of our theories conjectures, and guesses" (Popper 1979: 73). Examples of such knowledge would be "theories published in journals and books and stored in libraries" (Popper 1979: 73).[13] Note that the "objective" items here are not paper sheets, but rather the abstract theories that reside in (and, when interpreted, are transmitted by) token sign-vehicles

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11   For a detailed story about normativity that counts as "naturalist" in the liberal sense outlined by Putnam, see Champagne 2011.

12   Popper considered Peirce to be "one of the greatest philosophers of all time" (Popper 1979: 212) and praised him for espousing indeterminism in physics (Popper 1979: 213, 296; Popper, Eccles 1981: 22–23).

13   Because Popper took seriously the semiotic artefacts used by scientists, his work briefly attracted the attention of Thomas Sebeok (1979: 204–205).

(see Skagestad 1999: 555–557). This suggests that a commitment to physics needs to be augmented with something that can track the flow of information. In keeping with this, Popper locates physical facts in what he calls "world 1". Popper describes "world 2" as "the world of our conscious experiences" (1979: 74). The theories and ideas transmitted by symbols belong to "world 3".

Although it is tempting to see world 2 as bridging worlds 1 and 3 – those numbers certainly invite such a reading – that temptation must be resisted. To see world 3 as an outgrowth of conscious experience would be to consider rational entailments as rooted in psychology. Like Peirce, Popper rejects psychologism, and thus makes it clear that "there is a sense in which world 3 is *autonomous*: in this world we can make theoretical discoveries in a similar way to that in which we can make geographical discoveries in world 1" (Popper 1979: 74). World 3 is thus closer to Plato's realm of Forms: "We can discover new problems in world 3 which were there before they were discovered and before they ever became conscious; that is, before anything corresponding to them appeared in world 2" (Popper 1979: 74). If one wants to learn something about world 3, one should not study the physical brain (which is in world 1) or the mind (which is in world 2). Rather, one has to engage with the abstract items that populate world 3. Hence, "it is impossible to interpret either the third world as a mere expression of the second, or the second as the mere reflection of the third" (Popper 1979: 149).

The point of Popper's numeral labels, then, is not to indicate an ordinal arrangement, but to underscore the cardinal distinctness of the three worlds. This is different from Peirce's categories, where what is "First" logically comes first.

When Popper promoted his world 3, he was pitting himself against the arid materialist ontologies of logical positivism. Logical positivists appealed to basic sentences (like "I am seeing a red patch at location x and time y") as a way of "*directly* reporting the ultimate justificatory basis in first-person experience of the (objective and third-person) empirical claims of science" (Livingston 2013: 80). Scientific theories are indeed corroborated by joint observation, but such joint conduct is achieved/coordinated by means of signs. Positivists helped themselves to signs, but they never fully acknowledged their existence. They thus failed to notice that triangulating a correct referent can work only if utterances convey/carry some kind of meaning beyond mere sounds and gestures.

Giving the brain, the mind, and ideas "worlds" of their own was Popper's way of rectifying this. This strategy was somewhat crude, but I nevertheless think Popper should be praised for trying to accommodate what I and others (e.g., Baker 1987: 134–148) regard as the most formidable objection to eliminativism: *one must defend the reality, not just of an ontology, but of whatever the defence of that ontology presupposes/utilizes*. In crafting my trinitarian metaphysics, I will adhere to this slogan (which we should make into a bumper sticker).

4. The modal principle governing semiosis

For Popper, the ideal entities of world 3 are never allowed to migrate to world 1. Likewise, the material things of world 1 cannot leap into the unextended domain of world 3. None of these segregations hold in my trinitarianism, where the three parts of the sign can be switched around. If one were to postulate that the basic constituents of reality are "Up", "Down", "Left" and "Right", this would not allow one to grab something and declare, once and for all, that it is, say, "a Left thing". I believe that we ought to regard the parts of the sign as real, but not in this crude way. So, if we want to get a firm handle on semiosis, modal logic provides a far better key.

C. I. Lewis, one of the founders of modal logic (Lewis, Langford 1959[1932]), was charged with cataloguing the Peirce manuscripts at Harvard (see Pietarinen 2006: 53). I think that, while rummaging through those papers, Lewis caught a glimpse of a trinitarian ontology. Following this lead, I think we should see semiosis as governed by a modal principle or axiom:[14] necessity entails actuality entails possibility (we can picture the subsumption like Russian dolls nested in each other).

This principle, which I will use as my keystone, is both elegant and untendentious. If something is necessarily the case, then we can infer that it is actually the case (e.g., if it is true that humans must die, then clearly humans do die). Likewise, if something is actually the case, then we can infer that it was possible in the first place (e.g., if it is true that humans do die, then clearly humans can die). However, there is an asymmetry in what can be inferred (e.g., the fact that a vase can break does not mean that it does or must break).
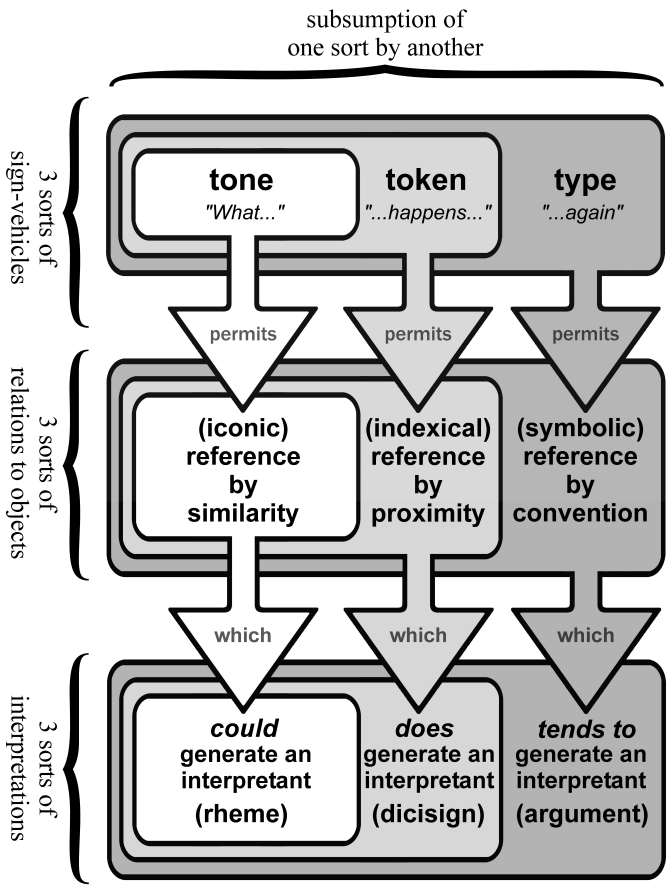
Peirce (CP 2.382) obviously did not live to read the work of Lewis, but Peirce was familiar with the treatment of these modalities in medieval logic (Knuuttila 1993). The standard idea of necessity might clash with fallibilism (see Houser 2006), so it might be wise to demote necessity to generality.[15] In any event, I suggest that modal asymmetry is the core principle governing meaning and being alike. Consider this my main thesis.

This can be given a robust treatment. Indeed, Peirce's theory tracks whether a sign-vehicle could, does, or tends to exist. Answers to that question in turn constrain whether such a sign-vehicle could, is, or tends to be related to an object. Finally, answers to that question constrain whether such a relation could, is, or tends to be interpreted. We can illustrate these layered constraints as follows:

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[14]   An axiom is a proposition not subject to further demonstration or proof. Ideally, a well-chosen axiom would have to be relied on in any attempt to refute it.

[15]   This would make the inference of P from generally-that-P probable, not deductively valid.

Table 1. Three layered trichotomies

subsumption of
one sort by another

3 sorts of sign-vehicles

| **tone** *"What..."* | **token** *"...happens..."* | **type** *"...again"* |

permits · permits · permits

3 sorts of relations to objects

| **(iconic) reference by similarity** | **(indexical) reference by proximity** | **(symbolic) reference by convention** |

which · which · which

3 sorts of interpretations

| ***could* generate an interpretant (rheme)** | ***does* generate an interpretant (dicisign)** | ***tends to* generate an interpretant (argument)** |

This is the famous "1903 classification" (laid out in Peirce 1998: 289–299).[16] In keeping with my suggestion that semiotics makes a good metaphysics, I do not think "being" is so elusive that it slips past this fine net of meaning (I also think that collective inquiry into the sign would undergo a major growth spurt if it required demonstrable mastery of Table 1 as a minimum professional competence).

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[16]   Like the movie character Forrest Gump, who was a gifted runner but did not know when to stop, Peirce also drafted his cryptic "1908 classification" (reconstructed in Borges 2014; with comparisons in Farias, Queiroz 2003). In my judgement, Peirce's three interpretants ('immediate', 'dynamic' and 'final') go over the same terrain covered by the rheme, dicisign, and argument. Likewise, his two objects ('immediate' and 'dynamic') recapitulate the dyadic encounter we find in the index. Some scholars (e.g., Atkin 2008) explore all the subsequent distinctions, but I am here focusing on what I take to be Peirce's peak *floruit*.

The table makes room for all sorts of signs. Thomas Sebeok (1979: 64) called ecumenicalism the "distinctive burden" of semiotics. Elimination is the cardinal sin of such a research programme. Indeed, "if semiotics is the science of signs, as the etymology of the word suggests, then it does not exclude any sign. If, in the variety of the systems of signs, one discovers systems that differ from others by their specific properties, one can place them in a special class without removing them from the general science of signs" (Jakobson, Pomorska 1983; quoted in Sebeok 1991: 77). One is of course free to study a codified sign system like language after having adopted such a wide vantage, but one will then do so with a renewed understanding that renders less mysterious where the human mind and its cultural products fit in the grander scheme of things. That is what metaphysical accounts are for.

The layers in Table 1 can be discerned, but they are not "distinct" in the way that, say, rock collections or kitchen utensils are. For one thing, the attempt to confirm the presence of a quality or event without triggering any kind of interpretation would be tantamount to "asking a flashlight in a dark room to search around for something that does not have any light shining upon it" (Jaynes 2000[1976]: 23). As a result, we can arrive at such distinctions only by means of a "formal" distinction. A formal distinction, also called a prescissive abstraction, is performed "by imagining ourselves in situations in which certain elements of fact cannot be ascertained" (CP 2.428). It thus lies between a "distinction of reason" and a "real distinction". A distinction of reason "is completely dependent upon the mind" (Jordan 1984: 44), whereas "things are really distinct if they are separable, that is, if they can exist one without the other" (Jordan 1984: 45). We can only wedge formal distinctions into semiosis.

Thus, if we start from the top-most trichotomy of Table 1 and percolate downward in accordance with what the modal asymmetries permit, we can discern ten signs (see Peirce 1998: 294–296):

       10. Type / symbol / argument
       9. Type / symbol / dicisign
       8. Type / symbol / rheme
       7. Type / index / dicisign
       6. Type / index / rheme
       5. Type / icon / rheme
       4. Token / index / dicisign
       3. Token / index / rheme
       2. Token / icon / rheme
       1. Tone / icon / rheme

Like the periodic table of elements, Peircean semiotics ranks signs using a basic model (i.e., the triadic sign) and a principled criterion (i.e., the modal axiom).[17] This tracks varying degrees of complexity and simplicity. The most complex sign is the argument – a recognizable type that has been assigned a conventional meaning which, once understood, compels the production of a further symbol. Everything prior to this is meant to give a foundational account of where such inferences fit in the world.[18] Let us now look at the bookends of this spectrum, as well as the causal sign located mid-way.

5. A look at salient examples

In his definition of the sign, Peirce (1998: 272–273) does not say that a sign is a thing that stands to a second thing in a way capable of determining a third thing. Things can certainly assume those roles; in fact, I have mainly used these as my examples (neurons, squids, people, and books). However, taking full-fledged things as our baseline would be somewhat careless, since what often matters in semiosis is only an *aspect* of a thing.

To count as a "thing", a thing must have a contour of some sort that distinguishes it from its surroundings. According to Peirce's analysis, this would already bring into play a relation: "Here is a glass object. [...] There is however something no part of which is altogether glass and no part altogether air. It is glass-air. This is the surface between the glass and the air" (Peirce in press). Clearly, Peirce saw the world differently than most of us.[19] In any event, since it turns out on careful scrutiny that a relation is present in any contour, we can decompose a bounded quality even further. For instance,

> If I perceive a French tricolor, I perceive a rectangle made of three horizontal stripes, of red, white, and blue. This involves experiences of those individual stripes. There seems a good sense in which I could have had the experience I had of any of those stripes without having the experiences of the others. (Shoemaker 2003: 65)

We can make a "real distinction" by cutting out the white portion of the flag with scissors, but only a "formal distinction" truly allows us to arrive at a lone white tone.

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[17]   For more on chemistry and Peircean semiotics, see Tursman 1989: 453.

[18]   As Tuomas Tahko (2008: 225) explains, usually, "[t]he relevant candidates for the grounds of logic include language, grammar and reality". I would say that my trinitarian ontology grounds logic in reality (while construing that reality in such a way that includes grammar and language).

[19]   I think that, by letting us zoom-in on giant colours meeting in a crisp line, modern painters like Barnett Newman have tried to call our attention to this feature (which naturally goes unnoticed in our practical dealings with things).

Deleting all relations means deleting all contrasts and comparisons. So, once there, there is no telling which flag it might be a part of.

Such an unrelated qualitative state is not (and could never be) encountered in actual experience, so it is, as Peirce (1998: 294) says, "a mere logical possibility". Still, studying the most barren situation conceivable helps us "ascertain what must be true of signs in order for them to embody meaning" (Liszka 1996: 10). Considered in isolation, the only interpretant that a lone quality like yellow could produce would be, also, yellow. Being the same, such a quality cannot be differentiated into numerically distinct parts. Still, like a city planner drawing lines on the ground before any buildings are actually erected, we can take any quality and draw what could be called a "pre-division":
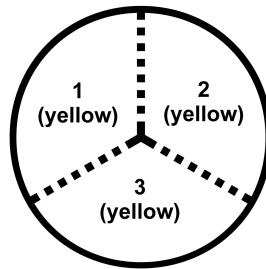

Figure 1. The tone / icon / rheme

This is the paradigm case of modal potentiality, since all the parts of this sign *could* happen.

Looking at this radically impoverished situation, Gérard Deledalle (2000: 15) points out that there is nothing we can say. That is true. However, few have noticed that, in its own bizarre way, Figure 1 satisfies the strict definition of the sign proposed by Peirce (1998: 272–273):

> A *Sign*, or *Representamen*, is a First which stands in such a genuine triadic relation to a Second, called its *Object*, as to be capable of determining a Third, called its *Interpretant*, to assume the same triadic relation to its Object in which it stands itself to the same Object.

If a yellow interpretant were produced, this Third yellow (noted as "3" in Figure 1) would stand in the same relation to the Second yellow that the First yellow stood.[20] The

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[20]   It is fruitful to consider that, if a yellow neuron were to somehow turn another neuron yellow (and so on), this conveyance of colour would allow the neurons to accomplish the same function(s) that they currently fulfil in the brain. Ned Block once suggested that the qualities of consciousness "might be like the water in a hydraulic computer", such that, despite their

triadic relay would be sustained by a shared quality. Even though the tone is a tranquil qualitative expanse not disturbed by the ripples of difference, its iconic potential sows the seed of all subsequent sign-action, since "[n]o sooner have we thought it that it becomes interpretable. This interpretation involves, in any case, the entire relational system, which is in some sense 'already there'" (Balat 1990; my translation, M.C.).

As my careful use of the subjunctive mood indicates, there are no relations in Figure 1. Making room for a pre-actual sign may seem strange,[21] but even in a science like chemistry, the notion of valence tracks which particles an atom could connect with – without saying whether the atom in question does (or ever will) have that connection. Likewise, semiotic theory assigns a placeholder for any interpretation, called a "rheme" (for the etymology, see Peirce 1998: 285). *The Routledge Companion to Semiotics* defines the rheme as "representing a qualitative possibility of some sort rather than a fact of the matter or a reason" (Cobley 2010: 307).[22] The rheme is not eradicated by the arrival of something concrete. On the contrary, when a quality is interpreted, this event delivers proof that the quality could be interpreted.

Countenancing sign 1 may seem superfluous, but it matters a great deal when we try to do justice to real-life cases such as "My (yellow) canary looks like that (yellow) banana":

> The important idea is this: If any two objects X and Y are similar in some respect, then X should possess that "respect" all on its own. Hence, were Y to vanish, X would retain the feature that made a comparison by similarity possible. Obviously, this applies to Y too. Yet, when we focus only on the relevant quality, we make ourselves unable to ascertain whether it is X or Y that is the quality's bearer. Hence, at the proper level of analysis, whatever makes Y and X similar to each other is indifferent to where it is found. (Champagne 2015b: 37)

Of course, a canary and a banana might resemble each other in virtue of another shared feature, say, a common shape. This just shows how important it is to properly pinpoint the relevant aspect responsible for a given "standing for" relation. Corrective feedback is crucial to confirming whether one has discerned the right feature, but there is no hope of eventual success if abstract disregard cannot cut through clutter. Hence, if a semiotic theory does not allow one to prescissively isolate yellow in its "pre-thing"

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apparent epiphenomenal status, "one should not conclude that the water in the hydraulic system does nothing" (Block 1995: 229; see the discussion in Champagne 2009a: 177).

[21]   For an account of Peirce's progression towards this view, see Fisch 1986: 184–200, as well as Almeder 1973: 7–13.

[22]   Peirce sometimes described the rhematic interpretant as "[t]hat which remains of a Proposition after removal of its Subject" (CP 2.95), but this terminology hides just how general the notion is (for a similar point, see Stjernfelt 2014: 76).

status, such a theory will reduce the similarity-based passage from the canary to the banana to a causal pairing of tokens, and thereby miss the shared quality that truly let one thing stand for the other (see Champagne 2014b).

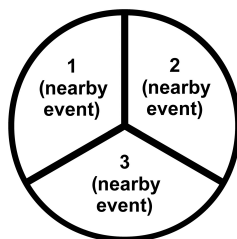Now, compare the first sign with the actuality of the fourth sign:

Figure 2. The token / index / dicisign

This is the paradigm case of modal actuality, since all the parts of this sign *do* happen. Sign 4 is favoured by many, because all its parts are observable. I have inserted the term "nearby" in Figure 2, because "[p]erception signs are [...] always spatially bound, and, since they take place in a certain sequence, they are also temporally bound" (Uexküll 2010[1934]: 54). If sound waves affect my ear drum and cause me to leap in surprise, the event has generated an actual interpretant. It is the triadic relation that renders such a cluster of events significant. A dicisign (from the Latin 'dicibile') is an interpretant that actually "says" or "asserts" something.[23] From this point onward, the dividing lines are no longer dotted, even though "[t]alking about the relationship between discrete causal facts implies that one abstracts from a continuous process of causation" (Hulswit 2001: 342).

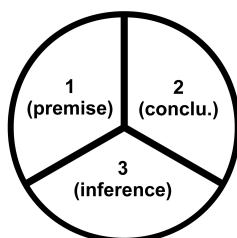Now, compare sign four with the most sophisticated sign:

Figure 3. The type / symbol / argument

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[23]   For an in-depth study of the dicisign, see Stjernfelt 2014.

This is the paradigm case of modal generality, since all the parts of this sign *tend to* happen. Consider for example the valid inferential pattern *modus tollens*: "If P then Q / not-Q // Therefore not-P". The sign-vehicle used to convey this argument has to be general enough not to be bound to any particular token instance. That type will need to have some coded link to its object. Finally, the symbolic notation will have to be so arranged that, in its own way, it will compel a specific interpretant. In a *modus tollens*, if one knows what "If P then Q" means and one knows what "not-Q" means, then one ought to also know "not-P". In other words, given the conjunction of certain symbols, further symbols follow. In this way, "strong arguments and good reasons spread with an agency that is in a way independent from the agency of those who disseminate them" (Nöth 2014a: 176). This passage from premise to conclusion is not mechanical, so it is better described as a tendency to conclude.

It would be hasty to assume that signs like the argument are found only among humans. A famous story by the ancient thinker Chrysippus[24] tells of a chasing dog that arrived at a three-tined fork in the road, smelled two paths, then chased its quarry down the remaining path – without first checking if that option had a scent. Assuming that this anecdote is true, we could reconstruct the canine behaviour as an inference: "P or Q or R / not-P / not-Q // Therefore R".[25] The trichotomies of table 1 inform us that, to count as an argument, verdicts about the smelled paths must survive a momentary detachment from their site of origin (otherwise a constant return to the previous path would be needed). Moreover, the dog would have to make the same inference in the same circumstances. Confirming this would require testing (like switching around which path is smelled last). Yet, if such generality is confirmed, I see no reason why we should refuse to acknowledge that inferential semiosis is at play.[26]

The first sign does not imply the fourth sign, and the fourth sign does not imply the tenth sign.[27] However, in the reverse direction, this independence does not hold. If, for example, one cannot bring the two premises in indexical proximity with each other, then there is no hope of eventually drawing an inference (let alone a correct one). This requirement applies equally to dogs and humans. For the canine inference

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[24]   The story is recorded in Book 1, Chapter 14, of Sextus Empiricus' *Outlines of Pyrrhonism*.

[25]   Naturally, this is a symbolic reconstruction. Still, like Pietarinen 2010, I see no reason why logical thinking could not operate in a non-visual medium (see Champagne 2015c).

[26]   In contrast with the classroom student of logic, what Chrysippus' dog lacks is an ability to meta-reflect on (and thus defend and correct) its inferences (see Brandom 2009). This is sufficient to ensure that an "abyss" separates humans and non-human animals (see Chien 2006: 75). Even so, we should not expect the distinctions of semiosis to map neatly onto natural kinds (as in Kull 2009).

[27]   My presentation of three straightforward examples has skipped over the intermediary signs that lie between them. For reliable expositions of the left-overs, see Liszka 1996: 43–52, Peirce 1998: 294–296, and Savan 1987: 1–14.

to take place, the smell has to actually be there. Moreover, the olfactory quality will have to be either present or absent, not both. It is this qualitative tenacity that renders all logical inference possible:

> Any object, A, cannot be blue and not blue at once. It can be blue and hard, because blueness and hardness are not thought of as joined in *quale*-consciousness, one appealing to one experiment and the other to another. But A cannot be blue and yellow, because these would blend and so the color would cease to be blue or yellow either. Thus, the positive truth in the principle of contradiction is that *quale*-consciousness has but one element. (CP 6.231)

It is only because some contents (like the middle term of the syllogism) are shared by premises that those premises can be linked. In addition to his pioneering work in modal logic, C. I. Lewis (1956[1929]) was one of the first philosophers on record to discuss "qualia" (Livingston 2004: 6–8) – a synonym of "tone" also coined by Peirce (1998: 272). Appropriately enough, valid inferences like deduction are often said to be "monotonic" – literally "of one tone". Thus, in an elegant loop, it is the static nature of sign 1 that enables the distinctive rational motion of sign 10 (see Champagne in press a).

6. An ascending or descending order?

I have just worked from sign 1 to sign 10, but when I introduced those ten signs in the fourth section, I ranked them using a descending order. This is no accident. Frederik Stjernfelt recently noticed that, later in his studies, Peirce felt it best to "begin with the *most* complicated (or complete) sign type, that of the Argument, effectively inverting one of the lists given" (Stjernfelt 2014: 92 fn34). This may seem minor – Stjernfelt confines his observation to a footnote only – but I think we should make a big deal of the inversion, because it pre-empts major pitfalls. Let me flag a few of these.

First of all, sign 10 can be confirmed in everyday experience, whereas the bare quality of sign 1 is an ideal limit case that can be arrived at only via an artificial disregard of what is, in point of fact, complex. If we really uphold this ban on all relations, we risk getting stuck, because the lone quality we obtain leaves us no way to return to any kind of meaningful phenomenon. The ability to contemplate unrelated qualities and events thus allows humans to "form the idea of phenomena that we do not know how to detect" (Nagel 1986: 24). The tone/icon/rheme may be where prescissive analysis bottoms out, but starting with sign 1 would be a non-starter. So, if we are going to use modal layering to understand semiosis, we should be aware of this danger. To put it in terms recently used by Terrence Deacon (2014), "sign analysis" is feasible, but "sign development" is not.

Deacon thinks he can go in both directions. Putting that to the test, I would like to sit Deacon in front of a huge yellow screen and ask him how, *with just that yellow*, he can manage to conjure something else. Clearly, on those terms, he cannot. Deacon (2014: 95) may boast that his take on the ten-fold taxonomy is "the only viable path toward a semiotic cognitive science", but an account that purports to go from sign 1 to sign 10 with ascending arrows (see the image in Deacon 2014: 98) is surely in trouble if it cannot even make it past its first step.[28]

Deacon (2014: 103) says that "the irreducible process-nature of semiosis is most clearly exemplified by a comparison with inference". I agree. In fact, the very word "semiosis" comes from an ancient text by Philodemus (1978) dealing with the methods of inference.[29] Let me therefore use some basic inferences to show why Deacon's developmental account cannot work.

One of the most uncontroversial inferences in all of logic is called "simplification", and it has the following generic form: "P and Q // Therefore P". From that complex premise – which, naturally, can comprise more than two conjuncts – we can draw a simpler conclusion, but we are not rationally entitled to do this: "P // Therefore P and Q". Because the sign has discernable parts, there is a way for us to infer this: "Interpretant and object and sign-vehicle // Therefore sign-vehicle". Of course, when we isolate, say, the interpretant, we tend not to run into problems, because this part is defined in a way that reminds us of its association with an object and sign-vehicle.[30] However, if we use the simplification inference to isolate a sign-vehicle, nothing in this "First" part obliges us to see it as participating in a greater triad.

Figure 1 may license the uninformative repetition inference "Yellow // Therefore Yellow", but it certainly does not license more significant inferential linkages like "Yellow // Therefore Banana" or "Yellow // Therefore Coward". The moral is not that a colour cannot stand for fruits or character flaws – it certainly can.[31] The moral is that we cannot generate any sign-action from just a sign-vehicle. All the justified hoopla about triadic relations stems from this fact.

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[28]   Deacon has apparently been gripped by this picture for a while now, since as early as a 1976 student paper he claimed that "signs can be progressively constructed from simpler forms" ("Semiotics and cybernetics: The relevance of C. S. Peirce", quoted in Favareau 2010: 541).

[29]   For the historical context and relevance of that work, see De Lacy 1938 and Manetti 2002. Peirce knew of this text (CP 2.761), which is where he got the term 'semiosis' (CP 5.484).

[30]   Deacon may sometimes do his "very best to absolutely minimize Peircean terminology [...]" (quoted in Favareau 2010: 542), but it is rather hard to forget that there are other parts when one uses a term like "Third" (which is a motivated piece of jargon).

[31]   Using the useful models proposed by Eco (1986: 34) and Manetti (2010), we can embed a quality in an implication to obtain a symptomatic semiosis such as "If Yellow, then Banana / Yellow // Therefore Banana". Or again, we can embed that quality in an equation to obtain a coded semiosis such as "Coward is Yellow / Yellow // Therefore Coward". However, with only "Yellow", there is nothing else to conclude.

If, looking only at a huge yellow screen, a developmental proponent like Deacon conjures up something else, it is only by violating the technical definition of Firstness that he asked us to adopt. It is true that, by cataloguing modal layers, logic "is bound, by its very nature, to push its research into the manner of reality itself" (W 2.165). That said, those modal distinctions will not allow one to deduce any kind of world history. There was never a great "iconic period" in the same way that there was, say, a "Jurassic period".

Like Deacon (1997), Peirce was sometimes tempted to think that his categories somehow captured a grand evolutionary process.[32] Yet, unlike Deacon, Peirce realized that literally nothing can "happen" with sign 1. Peirce thus had to invoke questionable forces to get his armchair cosmogony started. His reasoning can presumably be reconstructed as follows: since we cannot infer complexity from simplicity, and since complexity exists, this shows that "growth comes only from love" (Peirce 1992: 354). It is not hard to trace what inspires Peirce's account: "The Christian doctrine of creation achieves this by grounding the concept of creation *ex nihilo* in the Trinitarian love of God" (Robinson 2010: 251). I want to distance myself from all this.

Discussions of Peircean metaphysics usually focus on his cosmological forces (Reynolds 2002), but I am interested only in the idea of a "metaphysics that recognizes all the categories" (Peirce 1998: 180).[33] How is "Growth only comes from love" a more plausible conclusion to draw than "Growth is only an illusion" or "Growth only comes from mischief"? The whole line of reasoning strikes me as fantastic. The passage from simplicity to complexity is not "growth". If it were, I could spontaneously "grow" a new hand by considering only my right hand – then zooming out to consider both hands. Hence, according to my secular trinitarianism, complexity does not "emerge" – we just let it re-enter the scene once we tire of its prescissive exclusion. Explicit metaphysical reflection should never eclipse the fact that "the world is always 'already there' before reflection begins [...]" (Merleau-Ponty 1974[1945]: vii).

Most of the time, the modal asymmetry kept Peirce moving in the right direction.[34] But since there were lapses, I want to be clear that my metaphysics involves logical subsumption, not magical saltation.

As I said, sign 10 can be confirmed in everyday experience. So, if we have to order the ten signs in an ascending or descending order, the argument is a better place to

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[32] For a good discussion, see Pape 2014.

[33] My approach is thus closer to Forest 2007: 734 than to Santaella 2009: 262–263.

[34] Interestingly, Peirce never said that "signs grow", only that symbols grow (see CP 2.302). This nuance (observed by Deely 2009a: 27) is in agreement with the idea, captured in Table 1, that a minimum level of structural complexity and modal generality must be present. For a good analysis of this topic hindered by a misleading title, see Nöth 2014a: 177–178; the misleading title is rectified in Nöth 2014b. Although I do not want to invite or sanction appeals to authority, I find it interesting that some renditions of the biblical cosmogony say "In the beginning was the Word" – i.e., a symbol.

start, since anyone having read this far will have confirmed its reality by performing a host of illative movements. Indeed, when a metaphysician or lay person purports to know the world, he/she purports to know, and in so doing takes a stand "in the logical space of reasons, of justifying and being able to justify what one says" (Sellars 1991[1963]: 169). Even so, I want to stress that "[t]he verbal argument is at most only stage setting; the heart of the drama is the invocation of experience and, indeed, the attempt to register accurately the felt force of relevant experience" (Colapietro 2010: 11).

Whether or not non-discursive layers deserve ontological recognition is a matter for each to assess.[35] We needn't, however, let that assessment rest merely on intuition or private insight. Rather, I think we can exploit Table 1's lower-right corner (the argument) to artificially strip away relations and glean a host of signs that are simpler. Wedging formal distinctions into semiosis gives us, not an ontology of relations (Bains 2006), but an ontology of relations and relata.

So, whereas some philosophies hold that "*The limits of my language* mean the limits of my world" (Wittgenstein 2002[1921]: 149; emphasis in original), my account significantly extends the range. Indeed, the whole point of trinitarianism's triple commitment is that one gets lone qualities (Champagne 2015b), their contrasts with each other (Champagne 2014a), and the plethora of more or less cohesive patterns – linguistic or otherwise – that ensue (Champagne 2013a). A metaphysical outlook could hardly be more inclusive.

7. Interpretation does not go "all the way down"

I am presenting trinitarianism as a finished product. Peirce, however, did not always have this layered outlook at his disposal. His intellectual journey began with the realization that "[w]e have no power of thinking without signs" (Peirce 1992: 30). This can have idealistic implications but, according to Peirce, "[n]othing can be more completely false than that we can experience only our own ideas" (CP 6.95). Of course, pronouncements like these do nothing to show why/how realism holds. So, unlike some of his current defenders (e.g., Misak 2013), Peirce was always sensitive to "one of idealism's most basic cautions: if one is to insist that there is existence outside of knowledge, then one should have the intellectual rigour of not attributing intelligibility to that existence, for this is, after all, what 'outside of knowledge' implies" (Petrov 2013: 413).

In order not to turn mind-independence into a self-defeating notion, Peirce elaborated a layered taxonomy that could acknowledge both the reality of our

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[35]   Sellars ([1991]1963: 127–196) and his followers (e.g., Brandom 2009) may dismiss all the signs below sign 9 or 10 as the "myth of the Given", but I think that, on the contrary, the brutality of signs like the token/index/dicisign can, like a sharp slap in the face, wake us from such academic myths (see Champagne 2015a).

interpretations and of a world that exists apart from those interpretations (Parker 1994). Aided by the three modalities, we can see that intelligibility (in Petrov's sense) means "being understandable", which can be prescissively distinguished from "being understood" (or "having to be understood"). Surely it is not incredible to say that, when we open a refrigerator door to survey its contents, the arrangement we find inside made some sense prior to our organizing gaze.[36] Formal distinctions thus allow us to grant the reality of Firstness and Secondness, while assigning them a proper place inside Thirdness (Peirce 1998: 179–195).[37] We may sometimes err in our quest to understand reality, but we do not confabulate, whole cloth.

The world, being intelligible, begins to look like a giant jigsaw puzzle, where interpretants supply the final pieces to pre-existing outlines that fit. "It seems a strange thing, when one comes to ponder over it, that a sign should leave its interpreter to supply a part of its meaning; but the explanation of the phenomenon lies in the fact that the entire universe [...] is perfused with signs, if it is not composed exclusively of signs" (Peirce 1998: 394). This view, sometimes referred to as 'pansemiotism',[38] is arguably one of Peirce's most challenging ideas. Historically though, sign-based metaphysics are not without precedent; they were found, for example, during the Renaissance (Westerhoff 2001). When Galileo said that the book of nature is written in the language of mathematics, he was, implicitly, making the world into a landscape of signs to be interpreted.

Scientific inquiry naturally attempts to draw a line between, say, meteorological forecasts and omens from mutton bowels. This division, however, is a fallible accomplishment that proceeds from an environment filled with mystery. On the trinitarian ontology I recommend, it is to this backdrop that we must (re)turn in order to test claims. Familial habit and inherited biology may give inquirers a considerable head start, but after that, there are no (or few[39]) guarantees. Indeed, if facts and fictions,

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[36]   The modal asymmetry I have defended is crucial here. A blatant violation of this "one-way" principle was committed by John Poinsot when he claimed that "it suffices to be a sign virtually in order to signify in act" (2013[1632]: 126). For a glimpse of the many confusions that this can generate, see Champagne (2013b: 286 fn5).

[37]   James Johnston (2012: 18) recently expressed doubts about accessing reality through Thirdness. However, if one truly understands what it means to be a "Third", a worry like this should not arise. After all, on pain of contradiction, how can one believe in the existence of the number three yet doubt the existence of the number two or one? Discursive intelligibility ceases below three-place relations, but it takes a logocentric enthymeme to see this cessation as eradicating being itself. For more on ineffability, see Champagne 2014a.

[38]   For an early official use of the term, see Nöth 1995: 81.

[39]   I agree with Machan (1980) that, philosophically, we can discern a handful of axioms that cannot be denied on pain of being accepted. For more on what those might be, see Champagne 2006. The rationalist aspiration of spinning all reality out of such simple certitudes is, however, hopeless.

truths and lies, all present themselves as "equally objective within our experience, then the sorting out of which-is-which is a problem rather than a given" (Deely 2004: 35).

As I explained in Section 5, 'thing' is not a primitive category for Peirce. His sign-based ontology thus challenges the commonplace view of the world as "made out of ultimate little things and collisions amongst them" (Ladyman *et al.* 2007: 23). A Peirce scholar like John Boler (1963: 162) may write that his "major complaint against [Peirce's] categories is that I find in them no place for *things*", but a semiotic ontology spares one the trauma that materialists must feel whenever paradigm shifts redefine their favourite stuff.[40]

Now, there may be good objections to sign-based ontologies but, at present, one finds mostly bad objections in the literature. The worst reason is to provide no reason at all. Guido Ipsen (2008: 21) is unfortunately correct when he reports that "[p]ansemiotism has […] almost become an accusation close to an insult". There have been attempts to restore civility and solubility to the debates (Champagne 2009b; Champagne 2013b; Rodríguez Higuera 2015), but now this article has added an important distinction: 'pansemiotism', taken literally, is the view that reality is made of *triadic* signs; whereas 'trinitarianism', as I have presented it, is the view that reality is made of signs *and all that such triads presuppose*.

I favour the latter view, but I leave it to exegetes to decide which is closest to Peirce. However, some critics have claimed that, in the Peircean worldview, "it's interpretation all the way down" (Barbieri 2013: 283). It is unclear what that even means, or why it should count as a reproach. At any rate, the fact that two-thirds of the categories – and six-tenths of the ensuing taxonomy – are devoted to cataloguing uninterpreted phenomena should suffice to establish that, in Peircean semiotics, interpretation does not go "all the way down".

7. Conclusion

Any semiotician who has asked "What is a sign?" has doubled as a metaphysician. C. S. Peirce, who was unconcerned with policing the boundaries of disciplines, suggested that signs might be a fundamental ontological ingredient. In an effort to render this suggestion more robust, I have argued that modal asymmetry governs meaning and being alike. We can use the (generality(actuality(possibility))) subsumption to obtain a full technical breakdown – from inchoate feelings to notational systems regimented with military precision.

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[40]   Some philosophers of science (e.g., Ladyman *et al.* 2007) have argued that the best theories in current physics do away with the idea of 'things' altogether. There is no consensus on how best to view a post-thing world, but interesting proposals have been made (see Ross 2000, discussed in Champagne 2013a).

As we master this layered account, the idea of positing three "worlds" begins to seem rather simplistic. Alas, Popper-like misconceptions persist, so I have tried to clear a few of these along the way: semiosis is not scale-relative, it does not provide any kind of world history, it does not necessarily map onto natural kinds, it does not involve magical saltation, and interpretation does not go all the way down. In light of these exclusions, one might wonder what a trinitarian ontology is good for. Well, quite a lot, on my telling: it makes room for anything a semiotician might experience, and thus anything a semiotician might want to study – given their personal research interest(s).

Of course, this inclusive worldview can take some getting used to. But, if my layered account can make a sign-based ontology look more plausible/palatable, I will consider that progress.[41]

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