Can Pragmatists Believe in Qualia?
The Founder of Pragmatism Certainly Did...

Marc Champagne

C. S. Peirce is often credited as a forerunner of the verificationist theory of meaning. In his early pragmatist papers, Peirce did say that if we want to make our ideas clear(er), then we should look downstream to their actual and future effects. For many who work in philosophy of mind, this is enough to endorse functionalism and dismiss the whole topic of qualia. It complexifies matters, however, to consider that the term qualia was introduced by the founder of pragmatism himself. Peirce was adamant that only triadic relations can support language and cognition. Even so, he insisted on purely logical grounds that, when we analyze triadic signs all the way, we are left with a qualitative residue he called Firstness. Such an isolated relatum could never be studied experimentally. Yet, given that this primitive state can be confirmed by means of a formal or prescissive distinction, I believe the Peircean account can do justice to many of the intuitions that generate the so-called hard problem of consciousness. My goal, then, is to show that Peirce’s semiotic commitment to qualia is compatible with his foundational statements about pragmatism.

Keywords: pragmatism, qualia, Peirce, complexity, simplicity, prescission

1. Introduction

The most solid explanations of the mind are arguably those that start with an input that enters “at the gate of perception” and end with an output that exists “at the gate of purposive action” (Peirce, 1998, p. 241). Yet, no matter what those explanations look like, they seem destined to relate states. This involvement of relations would be benign, were it not for the fact that a prevalent construal glosses consciousness as having a non-relational element to it. The functionalist program calls for an account of psychological facts in terms of relations, but at least one dimension of our psychological lives seems to involve experiential qualities conceived apart from any relation(s) (Block, 2011).

As a rule, pragmatists tend to dismiss this idea of a qualitative surplus. Pragmatism requires that truths be answerable to some sort of tangible verification, preferably of a scientific kind, but “the word quale and its plural qualia were introduced into philosophy as technical terms precisely in order to capture that aspect of an experience that escapes the scrutiny of any natural science” (Hattiangadi, 2005, p. 342). It complexifies matters, however, to consider that this term qualia was introduced by the founder of pragmatism, Charles Sanders Peirce (1998, p. 272; see Livingston, 2004, p. 6). He also called them qualisigns.

Central to Peirce’s original account is the idea that humans can take anything, internal or external, and focus on its qualitative character to the exclusion of all else.
That is one of the three perspectives that his semiotic theory of consciousness affords (Houser, 1983). In this paper, I will argue that, properly understood, Peirce’s nuanced account manages to make sense of the intuition that the qualitative dimension of consciousness escapes scientific description. It is not that Peirce took experiential qualities to escape verification. Rather, he held that experiential qualities are amenable to a different kind of verification, one that is neither scientific nor introspective, but logical.

There is a growing sense that adding supplementary layers of complexity will not dissipate the hard problem posed by the qualitative dimension of consciousness. Soren Brier, for instance, writes that if a philosopher of mind like David Chalmers is to successfully deploy a concept of information that is “beyond functionalism and computationalism,” he will need “to add Peirce’s semiotic philosophy to his theory” (Brier, 2008, p. 38). I agree. At present, there are many different views on how this addition ought to be carried out. The modest aim of my paper is not to resolve those debates, but only to show how pragmatism can be consistent with an endorsement of qualia.

To do this, I will begin by looking at Peirce’s analysis of simple qualities (section 2). I will then draw parallels between Peirce’s reliance on a formal distinction and current debates about consciousness (section 3). Formal distinctions are what allow us to intelligibly discern simplicity in a complex (experiential or material) world (section 4). Since qualitative simples could not be verified or tested by any other means, I will engage with scholars who are uncomfortable with the non-naturalist implications of Peirce’s semiotics (section 5). Finally, I will sketch a way to reconcile Peirce’s pragmatist and pro-qualia views (section 6).

If a commitment to qualitative consciousness precludes a commitment to pragmatism, then Peirce, the founder of that tradition, was guilty of a major contradiction. I do not think he was, so I want to pay attention to how he could have it both ways, venturing novel arguments along the way.

2. Something We Can Verify

Many present-day naturalists accept nothing except quantifiable experimental data. Peirce was conversant with (and contributed to) early advances in neuroscience (see Pietarinen, 2006, pp. 71–76), but he was never a naturalist of that kind. True, his pragmatist maxim does say that, if “the object of our conception” does not “conceivably have practical bearings” (Peirce, 1992, p. 132), then we have no basis to credit our concept with having an object. One might thus argue that because current discussions of consciousness sometimes call on “zombies” who display no practical difference from regular humans (Kirk, 1974; Chalmers, 1996, pp. 94–105), those discussions violate the founding intent of pragmatism. Yet, what tends to be overlooked is that, before one can delete qualia from experience-free zombies, one has to focus on a very narrow construal that deletes all relations from a given quality. I submit that this construal of a lone quality bears a striking resemblance to what Peirce
Can Pragmatists Believe in Qualia? wrote about Firstness. Those eager to invoke the pragmatist maxim to dismiss consciousness should therefore remember that Peirce saw good grounds to countenance qualia. In fact, Peirce called on his semiotic categories to prove the pragmatist claims that won him fame (see Peirce, 1998, pp. 402–414, 429–431).

It might therefore be helpful to distinguish between two versions of Peirce. There is, on the one hand, the better-known version who founded pragmatism and managed to get a few key articles published at an opportune time. Yet, there is also, on the other hand, the lesser-known (but increasingly appreciated) version who made unparalleled advances in the philosophy of signs which, until recently, remained mostly unpublished. This is a rough division, but it helps. The fact that the Essential Peirce collections are cut into two volumes renders that division even more vivid. The cover of the first volume shows the younger Peirce, who instructed us to focus on the practical effects of a concept in order to clarify its meaning, whereas the second volume shows the older, more heavily bearded, Peirce, who relentlessly investigated a neglected branch of philosophy called semiotics.

A newcomer who turns to the second Essential Peirce volume bent on figuring out what all this fuss about signs is about will quickly find an essay titled “What is a Sign?” That essay begins by noting that its title question is most necessary, but also very difficult. A mere four lines in, Peirce tells us that “it is necessary to recognize three different states of mind” (1998, p. 4). The first state of mind Peirce invites us to consider is that of a red feeling, and nothing else. The reader who came in expecting a discussion of traffic signals will likely wonder at this point whether Peirce has veered off topic. He has not. Peirce’s goal is to evince the conditions for the possibility of sign-action. He wants to make a point: With a quality like red and just red, there can be no flow of consciousness. If one finds such a flow, the impetus must be from a source different from the quality itself.

Implicitly, Peirce is making an additional point, just as important, which is that we can follow through with his invitation to consider a quality like red in complete isolation from anything else. Logically, it can be done. Peirce makes sure to emphasize that, phenomenologically speaking, “nobody really is in a state of feeling, pure and simple” as he just described (Peirce, 1998, p. 4). Yet, he observes that “whenever we are awake, something is present to the mind, and what is present, without reference to any compulsion or reason, is feeling” (Peirce, p. 4). Thus, from a logical point of view, qualities take center-stage, long before thinking enters the scene and the drama of cognition proper begins.

Applying philosophy of signs to address philosophy of consciousness is thus perfectly natural. As we have just seen, when Peirce asks “What is a sign?,” he begins by distinguishing states of mind. Alas, most philosophers interested in consciousness are not well-versed in semiotics. That is a hindrance, since much of the current puzzlement about the qualitative dimension of consciousness stems from a failure to properly handle the fine-grained distinctions found in the sign theory of Peirce. Nathan Houser, who spent decades editing Peirce’s papers, surmises that, in the long run, “Peirce’s semiotic may prove to be his most important contribution, really the
creation of a new science” (quoted in Bellucci, Pietarinen, & Stjernfelt, 2014, p. 129). I argue that this science is exactly the sort of fundamental theory of consciousness that David Chalmers (1996) has been searching for.

3. Peircean Semiotics: A Fundamental Theory of Consciousness

In his book, The Conscious Mind: In Search of a Fundamental Theory, Chalmers zeroes in on a very specific dimension of conscious life: “On the phenomenal concept, mind is characterized by the way it feels; on the psychological concept, mind is characterized by what it does” (Chalmers, 1996, p. 11, italics in original). Interestingly, few commentators have noticed that, in order to avoid begging the question, Chalmers never calls on zombies to justify the concepts teased apart in his opening chapter on “Two Concepts of Mind” (Chalmers, pp. 3–31). Indeed, if we read Chalmers closely, we notice that he first pinpoints a very narrow sense of experience and only then asks us to conceive of experience-free zombies. This means that, whatever stance one takes on the traditional issue of dualism versus (materialist) monism, the quality/function distinction can be made intelligible on its own grounds. Chalmers and his commentators seem to consider the distinction between two concepts mere table setting, but I think it is where all the major action transpires.

I am not interested in the metaphysical possibility or impossibility of zombies, but rather in the distinction that makes this very proposal intelligible. As I see it, the function/quality distinction that Chalmers and others appeal to is underwritten by our generalized ability to artificially tease apart the parts of a sign. Chalmers (1996, p. 16) speaks of “the double life of mental terms” and emphasizes that while “our everyday concept of pain presumably combines the two [concepts of phenomenal pain and psychological pain] in some subtle weighed combination, … for philosophical discussion things are clearer if we keep them separate” (Chalmers, p. 17). What might this “keeping separate” mean?

Clearly, it is not a matter of physically isolating one from the other, like severing the corpus callosum. If you think you can put a quale in a test-tube and stare at it like you would a sample of red blood, then you do not know what a quale is. You can certainly stare at the red quality, put considering it apart from the liquid blood requires an abstraction that no machine can provide. Is the distinction then just mere word-play? On a superficial level, feeling and doing are certainly different words, so we might well be fooling ourselves when we apply such different words to describe conscious experience. However, the suggestion by Chalmers is that those words also “cover different phenomena, both of which are quite real” (Chalmers, 1996, p. 11). Since we are dealing with something more substantive than different words yet less palpable than physical separation, I argue that we are confronted with what Peirce called (after Duns Scotus) a formal distinction.

A formal distinction, also called prescission (or prescissive abstraction), lies between a distinction of reason and a real distinction. Real distinctions are the easiest to compass. “Things are really distinct if they are separable, that is, if they can exist
one without the other” (Jordan, 1984, p. 45). At the other extreme, we find a
distinction of reason, which “is completely dependent upon the mind” (Jordan, p. 44).
Formal distinction, which is the type of distinction I am most interested in, is
somewhere in the middle. Peirce used this distinction of distinctions to tease apart the
ordinal steps involved in the action of signs, and I think we can do the same to
profitably disambiguate important puzzles about phenomenal consciousness.

4. Qualitative Simplicity, Subsumed in Relational Complexity

To begin to see how the formal distinction can help, consider the setting called the
“Game of Life.” The Game of Life is not a game at all, but rather a self-organizing
system invented in the 1960s by the mathematician John Conway (see Poundstone,
1985, p. 24 for the cybernetic origins of this design). It consists of a primitive set of
axioms or rules successively deployed on a two-dimensional grid of cells. As these
rules are successively implemented, they give rise to more or less cohesive patterns
which viewers can categorize with some regularity. As Daniel Dennett (1991)
emphasized, these morphological types command some measure of predictive power.
Thus, if one has ascended to a level of description sufficiently abstract for a pattern to
be salient, then one can tell, for instance, that a “glider” is about to fall prey to an
incoming “eater”:

Looking at the setting depicted above, we can make the following observations:

1. It is complex.
2. There is no such thing as a neighbourless cell pixel.

Now, consider what happens when we add the following claim:

3. Complexity subsumes simplicity.
I hold these three claims to be true. Yet, their conjunction can create a tension because, in principle, claims (1) and (3) allow for the supposition of a neighbourless cell pixel—even though claim (2) states that, factually, there is no such thing. So long as humans are capable of realizing this, worries about the the intrinsic character of consciousness will persist. By inserting a formal distinction in the subsumption of (3), prescission lets us see how the conjunction of these claims can be consistent.

Figure 1 supplies evidential support for claims (1) and (2). Why, one might ask, should one accept claim (3)? The idea that complexity subsumes simplicity is so obvious that even an eliminativist like Paul Churchland grants it:

The bulk of one’s sensational life is characterized, not by simplicity, but by an extraordinary and ever-changing complexity. Listening to a conversation, looking around a flower garden, tasting a braised-lamb stew, smelling the aromas in a wood-working shop—our sensations in such cases display intricacies that are amazing. And not always obvious. A young child may not appreciate that the distinctive taste of her first ice-cream cone resolves itself into sensations of sweetness, creaminess, and strawberry. And it may take her awhile to learn that such decompositions are both common and useful to keep track of. For the complexities we encounter are indeed composed, quite often, of simpler elements or constituting dimensions. In time, we do learn many of those simpler dimensions. A dinner-table conversation contains my brother’s unique voice as an identifiable element; the complex flower-garden displays the striking orange of a typical poppy blossom; the lamb stew displays the distinctive taste of thyme, sprinkled into the mix at the outset; and the smell of yellow cedar stands out from the other smells in the wood shop, at least to a seasoned carpenter. Each of these particular qualitative features of one’s inner phenomenological life is certainly a simpler dimension of a more complex whole. (Churchland, 2011, pp. 32–33)

If we begin (as I believe we must) with a premise of complexity and grant (as I believe we should) that anything involved in complex relations can be prescissively decomposed, then we are led to conclude that, in principle, such decomposition would have to bottom out at simple qualities. This is so regardless of whether the complex strand we prescind is construed as external or internal to the mind. As long as that object of study demonstrates relational complexity, a thoroughgoing analysis will arrive at Firstness. Hence, “qualitative characters that are at least apparent simples are thus utterly inevitable on both approaches to understanding the mind, dualist and materialist” (Churchland, 2011, pp. 33–34). Churchland thinks he can avoid the “gathering consensus that the qualitative dimension of our conscious experience is something that the physical sciences … will never explain” (Churchland, p. 17) by merely annexing the adjective apparent, but I think the inference at hand is more formidable.

Churchland insists that the world does not permit us to encounter a quality in isolation; in this respect, he is undoubtedly right. The attempt to access some phenomenal quality without triggering any kind of tangible effect 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, p. 23). Thus, anything which makes sense to us will necessarily be embroiled in relations. Among these, we find similarity relations, causal links, and even arbitrary imputations. Thus, conscious life is, like the world at large, teeming with activity, and Peirce’s semiotic theory lets us do
justice to this without veering into any kind of reductionism. I believe that, at minimum, the formal distinction that Peirce employs lets us do justice to a fundamental truth: the idea of a relatum without any relation(s) makes sense, but the idea of a relation without relata does not.\(^2\)

Peircean semiotics thus allows one to adopt three different perspectives on any meaningful phenomenon: considering anything, there will be \textit{it}, what it stands \textit{for}, and what it stands \textit{to}. Despite the fact that the action of signs is always triadic, humans can conceive—and thus request an account of—the intrinsic, non-relational, nature of any thing, because we are the sorts of beings for whom that idea makes sense. Yet, the lone quality one gets when one artificially deletes all relations is not something one can ever talk about—on pain, that is, of reintroducing relations. Hence, so long as complex relations subsume simple relata, we will have to concede, as Peirce did, that “logic teaches us to expect some residue of dreaminess in the world ...” (CP 4.79). However, given that qualitative simplicity does not entail complexity (or any kind of relation), this asymmetry can act like a fishhook, letting us reach ineffable qualities—but preventing us from going back to the level of triadic relations where cognition, discourse, and science are possible. I thus think the conceptual tool of prescission used in Peircean semiotics accounts for how/why humans can “form the idea of phenomena that we do not know how to detect” (Nagel, 1986, p. 24).

5. Semiotic Inquiry, in Full Bloom

Interestingly, when John Locke introduced the word \textit{semiotics} in the penultimate paragraph of his 1690 \textit{Essay Concerning Human Understanding}, he surmised that a sustained reflection on the nature of signs might provide us with a very different viewpoint on some perennial problems of philosophy. No one has done more than Peirce to realize this vision. Yet, Peirce saw himself merely as “a pioneer, or rather a backwoodsman, in the work of clearing and opening up what I call semiotic, that is, the doctrine of the essential nature and fundamental varieties of possible semiosis”—a field he considered “too vast, the labor too great, for a first-comer” (CP 5.488).

Although semiotics has a long history, especially during the Medieval period (see Deely, 2001), it became an organized research program only in the mid-twentieth century. Charles W. Morris was in all likelihood the first to explicitly teach a university course in semiotics in Chicago in the 1930s (Sebeok, 1991, pp. 75, 123). The inquiry gained further institutional form at a 1964 conference in Bloomington, Indiana, where scholars from varied fields rallied under a common semiotic banner (Rey, 1984, p. 92). The International Association for Semiotic Studies (IASS) held its first world congress in 1974 and has been publishing its proceedings ever since. Although one has to select them wisely, reliable encyclopaedias and textbooks in semiotics are now available (see the list of robust entries gathered in Champagne,

---

2. Note that, in logic, leaving the relata of a relation undefined is not at all the same thing as holding that a relation like conjunction can occur without \textit{any} conjuncts. The former view makes perfect sense, but the latter view does not (strangely, in philosophy of mind, the latter is quite prevalent).
2014), and the inquiry attracts a growing number of scholars who publish in established peer-reviewed journals.

As this brief historical and institutional survey shows, semiotics is bigger than Peirce. It was Peirce’s hope that others would pursue (and not just transcribe) his investigations, so he would undoubtedly be delighted to witness the disciplinary vitality currently on display in the semiotic literature. After a sea change from the culture-centered semiology of Saussure to the more encompassing approach of Peirce, many now define their academic identity by the pursuit of the very inquiry that Peirce put on a secure footing. Strangely though, some Peirce scholars are unhappy that semiotics is doing so well. Thomas Short (2007), for instance, bemoans the fact that Peirce has been taken up by “semioticians.” Short’s disdain is so palpable that he picks up the term *semiotician* only with quotational tongs. This attitude makes little sense to me. Why would anyone who finds value in Peirce’s work regret the explosion of interest currently on display in journals and books?

Territorial impulses arguably motivate Short’s “rather cavalier dismissal of semioticians” (Colapietro, 2006, p. 17). Indeed, as an American and a philosopher, Peirce was part of two communities known to guard against outsiders (see Klein, 2013). Ironically though, “the spread of Peirce’s fame throughout the world during the second half of the last century is much indebted to the work of many serious semioticians and not strictly to the one of philosophers” (Santaella, 2006, p. 179). Short nevertheless regards semioticians as “the wrong crowd” (Short, 2007, p. ix). Thus, to keep this group at bay, Short inserts a letter: semiotics (as I have spelled it) gets construed as “that movement which originated in Europe independently of Peirce and that later appropriated him, with confusion all around” (Short, p. ixf1), whereas *semeiotic* with an extra *e* is reserved for Peircean ideas untarnished by such intrusions.

Given what I have said, I obviously agree with Short (2007, p. ix) that “contemporary discussions in the philosophies of mind and science might benefit from a deeper study of Peirce’s ideas.” Methodologically, though, I do not share Short’s constant desire to square with (what he takes to be) natural science. Short may want to reform naturalism to some extent by rehabilitating the notion of teleology (Short, pp. 91–150), but the deferral to science exerts a constant pressure on his thinking. Given the prevalence of naturalism in current analytic philosophy, his attitude is by no means unusual. However, at the risk of alienating myself from a fashionable trend, I think prescission is a mental operation one can do from the armchair. I do not doubt that our prescissive power to suppose some relations absent can be naturalized. However, I doubt the result of that power—namely a lone quality not interacting with anything else—could ever count as natural in the usual sense (unless, that is, we are prepared to revise what it means to be real).

Admittedly, those influenced by Peirce’s semiotic analysis of qualities will be led to say some things that natural scientists do not. Responding to this, Short seems to think “that there is some sort of warfare afoot between respectable intellectuals and barbarians at the philosophical gate” (Ransdell, 2007, p. 655). In a different context, such a silly attitude would hardly concern me. Yet, pragmatism was a tremendously
important idea/theme, so I am not prepared to sail away from the rich tradition it
spawned. At the very least, if pursuing philosophy of signs requires such an exile, it
must be on account of something more tangible than Short’s polemical expulsion. I
thus want to ask: Does belief in the non-functional character of experiential qualities
automatically place one outside the pragmatist tradition? My answer would be: Not
necessarily. Let me therefore sketch one possible reconciliation.

6. Pragmatism as One Stance Among Others

As Richard Bernstein reminds us, Peirce never “used the expression [pragmatism] to
describe his entire philosophical orientation” (Bernstein, 2010, p. 11). Peirce said,
quite rightly, that if we want to make our ideas clear(er), then we should look
downstream to their actual and future effects. Yet, there is a tendency to overlook that
this pragmatist recommendation is nested in a conditional: if you want clarity, then
you should do this and that. I see no reason (and, to my knowledge, Peirce gave no
reason) why anyone should feel obliged, in the strict deontological sense of a
categorical imperative, to pursue intellectual clarity, come what may. Rather, that
pursuit, which finds its maximal expression in collective scientific inquiry, seems to
be one among many.

In his best-known pragmatist articles, Peirce uses a series of foils to progressively
build up to the view that he finally wants us to endorse. In “The Fixation of Belief,”
Peirce looks at various methods of settling opinion. One method is presented
charitably, then a flaw is detected, which leads to the development of a better method,
followed by another flaw, and so on, until one reaches the fourth and final method,
that of science. By pooling our results and keeping our judgements open to revision,
the scientific method lets us turn our fallible shortcomings into learning opportunities.
Of course, it is normal to think that, if you are offered various options and you know
which is best, then you should pick that best one. So, predictably, when Peirce (1992,
p. 132) offers us three “grades of clearness” culminating in his pragmatic maxim, we
naturally assume that the other two were there mainly to rhetorically set the stage.
However, the moment we do this, we walk away from the possibility of something not
defined by its causal or inferential role(s).

William James was ready to relax the demands of scientific inquiry whenever
following those demands would result in increased personal suffering. John Dewey
expressed similar humanistic concerns while putting greater emphasis on collective
benefit as the bottom line. However, ideas like these have attracted the ire of militant
Peirceans. Cheryl Misak (2013, p. 436), for instance, says that “more often than not,
James and Dewey failed to make sense of something’s being objectively right or
wrong, leaving the door ajar for Rorty to pick up on certain of their statements and
open wide that divide.” Defining things in terms of their tangible effects is indeed the
best known way to settle disputes and foster the long-term march toward objectivity.
Part of what has happened, I think, is that in their rush to be branded as naturalists,
pragmatists like Short and Misak have lost sight of the fact that not everything is appropriately gauged by its current or anticipated practicality.

Building scientific consensus is nice, but so is enjoying simple experiences, even when the incommunicable character of those experiences ensures that they will not move the machinery of science one inch forward. To borrow an example favoured by Ned Block (1995, p. 34), “there are features of the experience of orgasm that don’t represent anything.” So, when you enjoy one of those, your aim cannot possibly be the end of inquiry.

Peirce endorses what might be called a triple-layer ontology (Champagne, 2015), so countenancing qualia constitutes only one-third of that comprehensive worldview. Despite the sophistication of Peircean semiotics, the triadic model of the sign that it employs makes room, at its core, for qualitative vehicles that are non-representational (Peirce, 1998, p. 294). Given that such simple qualities admit of a prescriptive vindication, I believe pragmatism is more plausible/palatable when it makes room for inefficiency—in the double sense of a respite from technological progress and an escape from efficient causation.

The latter idea, epiphenomenalism, seems to offend many sensibilities, but I think that, as an idea, it enjoys empirical support, at least if we allow ourselves to reason by analogy. To see this, imagine a collection of assorted coins from assorted countries, all placed in a jar. On the lid of that jar, a series of holes have been punched, all with the same diameter. Hence, when one shakes the jar upside down, only some coins will fall out, while others will remain trapped inside, being too large to pass through the holes of the lid. In a way, this situation selects, in an evolutionary sense, some individuals possessing a certain trait. Causal forces are clearly the excluders here. Judged by this standard, the quaint designs inscribed on the various coins are epiphenomenal. The profile of a dictator, the depiction of a rare bird, the bas relief of a national sports hero or famous waterfall—these are all differences that make no difference. In fact, copper, silver, gold—those are epiphenomenal too.

Of course, it takes only slight shift in perspective to realize that passing through the colander does not amount to possessing existence. So, the point of my analogy is not to show that epiphenomenal mysteries are easily solved, but rather to show how easily some perspectives can render features mysteriously epiphenomenal. There are many ways of looking at things, and pragmatists are supposed to be flexible, right? Hence, it would be nice if, in addition to the roster of stances catalogued by Daniel Dennett (1987), we followed Peirce and gave ourselves the right to also adopt what might be called the contemplative stance.

Acknowledgements

The stance taken in this article is distilled from (and further defended in) my forthcoming book Consciousness and the Philosophy of Signs (Springer). I want to thank all those who participated in and/or attended the symposium on that work at the 2015 “Toward a Science of Consciousness” conference. I am grateful to Jelena
Issajeva for organizing the event, and to Vincent Colapietro and Tyler Bennett for prompting me to clarify/expand key points. I also want to thank Henry Jackman, Cathy Legg, David Jopling, Jake Beck, Chris Green, Jagdish Hattiangadi, and anonymous reviewers for this journal. Members of the Peirce-Wittgenstein Research Group fostered a productive period of study that is still bearing fruits. Brief exchanges with Cheryl Misak (in 2003?) and Pentti Määttänen (in 2014) were instrumental in triggering my reflection. This article was written as part of the project Diagrammatic Mind: Logical and Cognitive Aspects of Iconicity, funded by the Academy of Finland and the Estonian Research Council. I am indebted to Ahti-Veikko Pietarinen, that project’s leader, for his friendship and ongoing support.

References