

Metaphysical grounds of universal semiosis

Fundamentos metafísicos da semiose universal

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Abstract: In the history of American philosophy there is a strand of thinking about signs in nature. Animals, insects, trees, flowers, the weather, landscapes, and the starry night are all found expressive of diverse meanings. Moreover, these natural phenomena are taken to possess a representational character at their ontological core by such thinkers as Ralph Waldo Emerson and Charles S. Peirce. My presentation builds upon this tradition by exploring the semiosis of nature in its fullest scope and with regard to its fundamental being. Its aim is to uncover some metaphysical grounds that would support universal semiosis, as well as argue for the primacy of an aesthetic dimension at the core of semiotic activity.

Keywords: Emotional interpretant. Objective idealism. Quasi-mind. Rheme. Sign's soul. The commens. Transcendentalist significance.

Resumo: *Na história da filosofia americana, há um filão de pensamento sobre os signos na natureza. Animais, insetos, árvores, flores, o clima, paisagens e a noite estrelada são todos encontrados expressivos de diversos significados. Além disso, esses fenômenos naturais são considerados por pensadores, como Ralph Waldo Emerson e Charles S. Peirce, como dotados de um caráter representativo no seu núcleo ontológico. A minha apresentação baseia-se nesta tradição, explorando a semiose da natureza em toda a sua extensão e no que diz respeito ao seu ser fundamental. O seu objetivo é desvendar alguns fundamentos metafísicos que apoiariam a semiose universal, bem como defender a primazia de uma dimensão estética no centro da atividade semiótica.*

Palavras-Chave: *Alma do signo. Commens. Idealismo objetivo. Interpretante emocional. Quase-mente. Rema. Significação transcendentalista.*

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1 Introduction

In the history of American philosophy there is a strand of thinking about signs in nature.¹ Animals, insects, trees, flowers, the weather, landscapes, and the starry night are all found expressive of diverse meanings. These natural phenomena are taken to possess a representational character at their ontological core. And they are seen to dynamically engage with an environment replete with sign-utters and sign-interpreters, and thus to jointly form an interwoven network of semiotic activity across species, organic and inorganic, terrestrial and cosmic. One unambiguous statement to this effect is spoken by the New England Transcendentalist philosopher Ralph Waldo Emerson. Nature, he asserts, is replete with signs: “nature is a symbol, in the whole, and in every part” (*CW*, III, 8).² And a parallel statement is made by the preeminent American semiotician Charles Peirce who sets down “that all this universe is perfused with signs, if it is not composed exclusively of signs” (EP 2:394). Other thinkers, such as Jonathan Edwards, Bronson Alcott, Henry James Sr., Henry David Thoreau, and more recently, John Deely and Robert Corrington express similar views while developing their own semiotic projects. My presentation builds upon this tradition by exploring the semiosis of nature in its fullest scope and with regard to its fundamental being. Its aim, in particular, is to uncover some metaphysical grounds that would support universal semiosis, as well as argue for the primacy of an aesthetic dimension at the core of semiotic activity.

My approach will involve examining the metaphysical upshots and aesthetic implications of Peirce’s semeiotic³ ideas, while exploring additional intimations from associated ideas in Transcendentalism. This kind of analysis of Peirce’s semeiotic, I admit, is a bit atypical of the normal interests of scholarship focusing on the purely formal or logical aspects of signs, which often take the form of ahistorical exegeses.⁴

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- 1 I recently traced out this strand of thought as it runs through New England Transcendentalism, whose like-minded philosophers, artists, and reformers brought to bear a “semiotic consciousness” across their varying projects; see Guardiano (2021, forthcoming).
 - 2 “Symbol” is Emerson’s general term for sign.
 - 3 I use Peirce’s preferred spelling “semeiotic” when referring to his theory of signs, and the more popular spelling “semiotics” when referring to theories about signs in general.
 - 4 Although, it is not completely atypical. See, e.g., Raposa (1989, chap. 6); Corrington (1993, chaps. 1 and 3); and Sheriff (1994, chap. 3). On the other hand, some authors have gone so far as to attempt to rid Peirce’s semeiotic of its metaphysical-cosmological aspects. For example, T. L. Short’s own systematic reconstruction of Peirce’s theory of signs argues that the scope of any intelligible semiotics cannot extend to the full biosphere or greater cosmos, which would include such things as DNA, plant life, and the casual laws of nature (SHORT, 2007, p. xiv, 177, 211, *passim*). Short mounts one argument for limiting the scope to human cognition by a detailed discussion of final causality and purposeful action as a necessary ground of semiosis (SHORT, 2007, chaps. 4-6). Short’s overall motivation in his reconstruction is to apply semiotics to the philosophy of mind and epistemological issues of scientific inquiry, and this leaves out, from his otherwise thorough book-length study, an examination of those of Peirce’s writings that address the broader and deeper universe of signs. Serving as an addendum to Short’s omissions is the recent anthology *Peirce and Biosemiotics: A Guess at the Riddle of Life* (2014),

However, it is far from irrelevant given Peirce's speculations or "musements" on the metaphysical underpinnings of signs in the world, which, in fact, are sometimes blatant. For instance, there is his remark, already mentioned, that the universe exists "perfused with signs"; his cosmogony that identifies the origin of the universe as a kind of symbolic singularity that produces an infinite series of interpretants; and his ontological claim that one of "the three Universes of Experience" has its being in the "Sign's Soul" (Peirce's capitals).⁵ My interest lies in treating such metaphysical musements with a serious commitment toward their value as a philosophical explanation accounting for the diverse modes of semiosis across nature. The reader who is interested in the context of Peirce's metaphysical musings about signs as they occur over the course of his career should consult the footnotes.

I should also mention as a prefatory remark that my arguments to follow contain experiential elements, and that I work from a conception of metaphysics as a fallible scientific discipline, in the Peircean sense. While metaphysics reasons about the most general features of reality, it still remains accountable to experience, whether that attained through scientific experiment or gleaned in our everyday lives. The same is the case with semiotics, which studies the formal features of signs and semiosis while still attending to our actual observations of signs in the world.⁶ A sense for the presence of signs within our immediate environments was especially important to the Transcendentalists who found nature to be expressive of deep spiritual truths. More generally speaking, they approached the world as one full of meaning in its interconnected relationships and creative developments. My thoughts to follow share in this sentiment.

2 Ontological grounds for "Catching On"

Let me begin with some examples of sign activity in nature. I'll start with one always ready at hand: the expressive and interpretive acts of my cat. She interprets the noise coming from outside our house as the threat of another cat approaching, and she utters back to the intruder the signs of her yowls and puffed up tail. My cat and I exchange signs too: I call her name, rattle the food bowl at meal time, and she sends me signs of affection by her tail caresses, as well as utters her special "wake up call" by nipping at my face in the morning. Of course, all mammals and presumably all animals use signs in order to communicate. And not only animals but plants too. We know from the natural sciences that organisms, in general, appear to engage on a semiotic level with their environments, environments that include members of the same species, as well as those from others. Organisms furthermore engage with the physical features of their immediate terrain, including landmarks, weather, and more. We are starting to uncover an immense extent and complexity

which powerfully substantiates the relevance of Peirce's semeiotic across the biosphere and beyond. See especially the chapters by Ivo Ibrí, Eliseo Fernández, and Vinicius Romanini, which advance a cosmological perspective of semiotics in the context of Peirce's architectonic philosophy.

5 See EP 2:322-324; EP 2:434-445.

6 For Peirce's definition of metaphysics, see e.g. EP 2:375; and for his definition of logic/ semeiotic, see e.g. CP 2.227.

of forms of semiosis in nature ranging from whale vocalizations to the movements of bee dances, the electrical signals sent across tree roots, and the very chemical foundations of life in the encoded messages of DNA.⁷ And I am one to think that nature possesses additional semiotic relevance beyond the material needs of the organism—a *transcendentalist significance*, so to speak, in the representation of thoughts and feelings. Here I have in mind what Emerson describes during one of his outdoor meanderings:

He who wanders in the woods perceives how natural it was to pagan imagination to find gods in every deep grove & by each fountain head. Nature seems to him not to be silent but to be eager & striving to break out into music. Each tree, flower, and stone, he invests with life & character; and it is impossible that the wind which breaths so expressive a sound amid the leaves—should mean nothing. (JMN, 1822, I:138).

With just these sorts of experiences in mind, Emerson will submit the physical beauty of nature as significant too. It expresses, for him, the special “mute music” of things (*CW*, I, 15; *Nature*).

Given the existence of this extensive and interwoven network of semiotic activity in nature, what kind of ontology is necessary for explaining its possibility? That is, given the successful functioning of the semiotic web, what does this suggest about the fundamental structures of being at play? Peirce’s metaphysical-cosmological speculations on signs provide some useful clues for working out an answer. One of these is his idea of “the *commens*,” which he argues is “that mind into which the minds of [sign]-utterer and [sign]-interpreter have to be fused in order that any communication should take place” (EP 2:478). To the same effect, he insists that during semiosis the two “Quasi-minds” of the “Quasi-utterer” and “Quasi-interpreter” must be united as one Mind: “In the Sign they are, so to say, *welded*” (CP 4.551). Peirce’s use of “quasi” here reflects his effort not to limit semiosis to the human domain; quasi-minds are “*repositories of thought*” not necessarily related to human consciousness (MS 318:421).⁸ Now, we know that a sign in its purely formal nature is an irreducible triadic relation between itself (or “ground”), the object for which it stands, and the interpretant to which it stands. As a consequence, it is not reducible to the “here and now” or any particular existential embodiment.⁹ A concrete instance of a sign is not the sign in its essential relationality but the medium through which the

7 See the recent popular scientific texts which compile a wealth of new research on the intelligent behaviors and communicative abilities of animals and plants: de Waal (2016); Wohlleben (2016); and Ackerman (2016).

8 On “quasi-minds” in semiosis, also see EP 2:544n22.

9 As a point of intellectual biography, Peirce’s non-physicalist view of the sign appears at least as early as 1880. Max Fisch points out that it is then that we see in Peirce’s doctoral student Allan Marquand’s dissertation on Philodemus the clear effort to make “a sign [...] not a kind of thing. The world does not consist of two mutually exclusive kinds of things, signs and non-signs. The fundamental distinction is not between things that are signs and things that are not, but between triadic or sign-action [semiosis] and dyadic or dynamical action” (FISCH, 1986, p. 329-330).

sign appears. Likewise, semiosis, as Eliseo Fernández explains, involves an “action [that] is quite independent of the physical nature of the vehicle, i.e., vehicles of totally different physical nature may mediate the same communication. The physical vehicle provides a transitory and ephemeral embodiment to the transmitted [sign-] habit” (FERNÁNDEZ, 2014, p. 92).¹⁰ Therefore, semiosis and communicative activity are poorly expressed by the image of isolated atomistic messages whizzing about from sender to receiver. Rather, semiosis involves the coming together of utter and interpreter, or object and interpretant, in a relational unity. Peirce’s quasi-mind of “the commens” describes that state of multiple, conjoined minds—whether persons or other creatures—participating in effective communication. In any semiotic transaction, say whether in a linguistic exchange or empathic sharing of feeling, there is the joining of minds and hearts.

Peirce eloquently expresses the nature of such a shared semiotic relationship when he states that “the purpose of a sign is to supplement the ideas of the life of which I, the interpreter, am a part,—ideas which I derive directly from my own life,—with a copy of a scrap torn out of another’s life or rather from his panorama of life[,] his idea of his life” (MS 318:453). If this sounds like the metaphysical joining of different beings-in-the-world, so much the better, I argue. Adding to the notion of “the commens,” although in slightly different terms, we can define semiosis as the transference or participation of a shared idea or form (*eidōs*) across the three semiotic elements, the object, sign, and interpretant. Here we describe the quasi-mind-stuff of the quasi-mind. As it so happens, this definition is precisely the one Peirce arrives at late in his career, that is, after decades of fine-tuning many formulations. A “Sign may be defined as a Medium for the communication of a Form.” And: “That which is communicated from the Object through the Sign to the Interpretant is a Form,” where “Form” is understood as “a power” having the nature of a conditional, “the fact that something would happen under certain conditions” (MS 793:1-3).¹¹ I will say more about the interplay of forms constituting a semiotic universe, momentarily.

So far, I am arguing for an objectively idealistic ground for universal semiosis. Or, in the choice words of Ivo Ibri, I am arguing for an (objective) idealism as a metaphysical “*backgrounding doctrine*” for the possibility of semiotic dialogue across the biosphere and beyond.¹² I want to continue on this path a bit further,

10 Also see John Deely, a semiotician working in the Peircean tradition, who explains that the sign has its being as a “transcendental relation.” Such is the case with every individual thing in so far as its peculiar character is determined by relationships that transcend the physical existence of the thing; e.g. a child has its nature defined by its intangible relationships with the surrounding atmosphere, gravity, its parents (even if deceased), and other existing and non-existing things (see DEELY, 1990, p. 38-39).

11 A fragment of the manuscript, which is believed to be a possible draft of “The Basis of Pragmatism in the Normative Sciences,” is also quoted at EP 2:389n22. Also see Peirce’s similar definitions of the sign: signs “communicate ideas [...] some form [...]. [or] idea-potentiality” (EP 2:388); “in the widest sense [a sign is] any medium for the communication or extension of a Form (or feature)” (EP 2:477). For another take, see Lane (2014, p. 67-68). While discussing the essential indeterminacy of all signs, Lane identifies the “immediate object” of the sign as a Platonic Idea or Form.

12 See Ibri (2014, p. 33-49); and Ibri (2019, p. 378-391).

but before doing so, it is useful to take a momentary detour into Peirce's greater philosophy. The theoretical position so far articulated I find compatible with Peirce's synechism and Schellingian metaphysics—a systematic link that helps frame the aspects of Peirce's semeiotic that I am highlighting. Mid way through Peirce's career, at least from the time of his *Monist* articles of the early 1890s, he argued for an idealistic metaphysics that understands mind to be the one fundamental or primordial reality of the universe. From the perspective of this “one intelligible theory of the universe”—which rebukes dualism, physicalism, and neutral monism—matter and physical law are atrophied states of mind and psychical law, respectively (EP 1:293). In connection with this theory, Peirce systematically coordinated a number of other metaphysical theories, including synechism, which holds that the substances of mind and matter, as well as physical law and psychical law, are on a single continuum of reality. In addition, he advanced a theory of the Law of Mind which describes a universal principle governing over ideas as they exist in a “relation of affectability,” tend to diffuse or spread out, and function in tandem to generate a continuous network of overlapping connections (EP 1:313). As Peirce came to acknowledge himself, some of the provenance of these philosophical tenets of his architectonic includes New England Transcendentalism and F. W. J. Schelling's ideal-realism.¹³ Although this is not the place to attempt to work out the many details of that history or the many possible connections between Peirce's metaphysics and semeiotic, we can at least see the beginnings of a greater metaphysical framework that is consistent with an objectively idealistic ground of semiosis.

Moving on, I next introduce another of Peirce's metaphysical musings about signs. It is what he calls the “Sign's Soul,” which he features as one of “the three Universes of Experience” or “three Modalities of Being.” The other two universes or modalities are “Brute Actuality” and “Ideas” (EP 2:435; and EP 2:478).¹⁴ The three members correspond to the Peircean categories of thirdness, secondness, and firstness, respectively. Simply put, for Peirce, a third serves as mediator between two seconds, a second is an unmediated pairing of two firsts, and a first is that which has its own positive character in itself. Also, there is a unidirectional dependency between the categories whereby a third implies a second, a second implies a first, and a first stands alone. The nature of the three Universes in regard to the categories will be important for what I have to say about them.

What I want to focus on here is Peirce's Universe of Ideas as “first” and its metaphysical status as the basic semiotic object of the cosmos. Cosmologically, Peirce understands that the purpose of the Universe of Sign is serving to mediate the rich plurality of indeterminate firsts toward a world of interpretants. The Universe's semiotic processes realize and extend the Ideas into determinate existence. Now, I argue, in the unfolding of interpretants across a universal web of semiosis, a priority maintains in the Universe of Ideas as “first.” These determine the sign, which subsequently determines the interpretant, by setting the conditions for the ways the sign may come to represent its object for its interpretant. They provide actual and

13 For detailed critical and historical analyses of these major positions of Peirce's metaphysics, see Ibri (2009, p. 273-307); Dilworth (2009, p. 43-59); Dilworth (2010, p. 22-47); Dilworth (2011, p. 53-74); Guardiano (2011, p. 13-30); and Guardiano (2017, p. 216-245).

14 See my full exposition on this triadic cosmology in Guardiano (2018, p. 77-92).

would-be interpretants with a variety of meaningful (albeit vague) content. Even more basic, they provide signs with their intelligibility per se, and hence, the very potential to be interpreted (in whatever way). As an aside, it should be noted that the creation of meaning or significance in the world is not something solely derived from the Ideas qua firsts. Meaning is ultimately the product of all three elements of the semiotic triad functioning as a relational unit.¹⁵

Elsewhere, while alluding to the universe “perfused with signs” in its idealistic metaphysical grounding, Peirce states that “every sign certainly conveys something of the general nature of *thought*, if not from a mind, yet from some *repository of ideas*, or *significant forms*, and if not to a person, yet to something capable of some how ‘catching on’, as a section of society says” (MS 318:419–421, my emphases). This broad definition of semiosis encompasses within its scope the disclosure of meaning across a vast array of semiosic channels. Throughout nature, organisms in their vital functions and daily activities, and by means of their specialized sense capacities and cognitive capabilities, are “catching on” to their environmental surroundings. This includes organisms “catching on” to other organisms across species lines, such as when we humans catch the drift of the behavior of our pets, farm animals, and backyard critters, and when they catch the drift of our behavior for themselves.¹⁶ And when we *do* catch the drift of nature, we tacitly acknowledge that its appearances are not vacant or vacuous, but possess meaningful content. Thoreau when once tracking a fox through the winter snow records that it was

[...] as if I were on the trail of the spirit itself which resides in these woods [...]. I am curious to know what has determined its graceful curvatures, its greater or less spaces and distinctness, and how surely they were coincident with the fluctuations of some mind [...]. The pond was his journal, and last night’s snow made a tabula rasa for him. I know which way a mind wended this morning. (THOREAU, 1961, p. 19).

Thoreau’s reflection is one of many made by the Transcendentalists on a universal mind or “Over-soul”—to use Emerson’s term—immanently residing in nature. Like Peirce’s Universe of Ideas and “commens” of conjoined minds, it describes the shared ontological ground for our lives and the lives of other semiosic beings who “catch on” to each other, thus participating in meaning across an expressive universe of signs.

15 Peircean semioticians often identify meaning with the interpretant. While that is certainly somewhat justifiable, I believe it short-changes the full triadic theory of the sign with its inter-informing elements. Peirce, in a manuscript passage (never before quoted in scholarship, as far as I am aware), clearly defines meaning in terms of the complete semiotic triad: “I prefer [...] to use the word ‘meaning’ [...] for the entire significance the sign conveys, object and interpretant *in transiter* together, securely boxed up in the sign for delivery” (MS 318:495).

16 Peirce himself discusses, on more than one occasion, the possibility of communication across species lines. See e.g. CP 7.379 and EP 2:193 where he argues that he comprehends the emotions of his dog and horse.

3 The aesthetics of semiosis¹⁷

Shifting to my next topic, I contemplate an aesthetic dimension of the sign and its importance for universal semiosis. By examining the essential triadic or trichotomic structures of the sign, as Peirce uncovered, I argue that there is a metaphysical primacy of the aesthetic at the core of semiosis—first, with regard to feeling or sensation (*aisthesis*), and second, with regard to creativity. Over the recent years, I have been developing a philosophy of nature called *aesthetic transcendentalism*, which promotes a worldview of nature as qualitatively rich and creatively prolific.¹⁸ My conclusions in this section are a semiotic sequel to that.

Peirce's semeiotic, as it turns out, highlights the importance of aesthetics in several ways. One way occurs in his threefold division of the normative sciences, which is itself one of three branches of Philosophy, along with Phenomenology and Metaphysics. As a normative science, Esthetics is "first" to the other normative sciences of Ethics and Logic (or Semeiotic), superseding the latter two by supplying their fundamental principles. Also, in Peirce's various trichotomic analyses of the sign and in his taxonomy of sign-types, there are the qualisign, icon, rheme, and emotional interpretant. Each one of these is featured as an aesthetic element that is "first" of its triad. Separate studies may be made to determine the nature of the primacy of all of these. In what follows, I limit my remarks to the emotional interpretant and rheme, while contemplating their bearing on universal semiosis.

In order to make my arguments, I need to get into some of the weeds of Peirce's semeiotic. Late in his career while refining his understanding of the sign, Peirce came to recognize not one but three kinds of interpretant, or as he sometimes called them, "proper significant effects" (MS 318:63). There is the "emotional interpretant," which is a feeling; the "energetic interpretant," which is an action or effort; and the "logical" or "intellectual interpretant," which is a thought or concept. For any given particular sign, one of these interpretants is most relevant or "proper" to the sign as such, while the first alone—the emotional interpretant—serves as a foundational requirement for any sign whatsoever. This is because the three interpretants logically depend on each other in the same way the three Peircean categories do. In accordance with this framework, the emotional interpretant as "first" would be *the fundamental interpretant ground of all signs*.

How is this the case? How is feeling involved in and, moreover, fundamental to all interpretants? Peirce explains: "Every sign whatever that functions as such must have an emotional interpretant; for under that head comes the feeling of recognizing the sign as such; and it is plain that a sign not recognized is not a sign at all" (MS 318:251-253). Peirce illustrates the matter using the command "Ground arms!" made by a military officer.¹⁹ The "proper" interpretant in this case is an energetic interpretant; it is the action of the butt of the muskets thumping the ground. Yet, this interpretant further involves the emotional interpretant of *the feeling* of familiarity on behalf of the soldiers upon hearing the command. For an undisciplined soldier

17 Some of my ideas in this section stem from Guardiano (2018).

18 See especially Guardiano (2017).

19 See MS 318:63-69, 251-255, and 281-289.

who does not follow the command, who does not successfully execute the action that is the proper response, this feeling is all that remains of the interpretant. We can add as a second example the act of listening to someone speak a language that one does not comprehend. Although the listener does not cognize the conceptual meanings of the signs, the listener at least has the bare sense or feeling—ignorance, anxiety, curiosity—that the words convey some meaning. That is, the listener is not completely oblivious, not a non-interpretant, but is minimally aware that the vocalizations are in some way significant.

These examples highlighting the emotional interpretant as minimal feeling of recognition show, moreover, that that feeling is an *intelligent* feeling, because it comprehends a sign as a sign; it “gets” something is performing representationally. By no means, then, are we dealing with a feeling that is simply a dumb emotion or blind *pathos*. Also, while the emotional interpretant is at least this minimal awareness, it comes in various advanced forms. Specific feelings associated with artistic appreciation, compassion for the well-being of others, and the felt-knack of professionals for their trade involve a special interpretive insight for the expressions of their objects.²⁰ At these advanced interpretive levels, furthermore, logical interpretants are at play, as sensitivities must be carefully cultivated alongside our habits of properly judging the world.²¹

Peirce’s emotional interpretant opens up a window onto a large expanse of semiosis across nature.²² Its status as the fundamental interpretant means that a sign may determine a feeling alone, without producing a physical action or an intellectual concept. Hence, the felt responses had by any sentient organism to its environment—say by a cat, dog, fish, or even an insect—may constitute forms of semiosis.²³ I say “may” because not all feelings are emotional interpretants, but only those that are the outcome of a meaningful exchange through a sign medium, as opposed to those that are merely the immediate effect of a dyadic interaction. This is true of human feelings, as well: the felt-pain experienced after hitting my finger with a hammer is devoid of any interpretation of my environment.²⁴ Nonetheless, many

20 As an example of the advanced emotional interpretant, Peirce gives a feeling had by an auditor of a piece of music: “The performance of a piece of music may excite musical emotions without being a sign. But if the hearer discerns in the notes the musical ideas or emotions of a composer; then the music conveys to him a message from the composer, and it becomes a sign. In such case the emotional interpretant is highly developed” (MS 318:253).

21 Ibri (2019) gives another elaboration on the interplay of emotional and logical interpretants, as each more or less impacts our efforts to mediate our representations—scientific, artistic, and other—with the facticity of the world.

22 I am not the first scholar to recognize such important consequences of Peirce’s emotional interpretant in its foundational semeiotic role. See Kruse (1990, p. 216-217); and Kruse (1997, p. 138-140).

23 For the more radical scientific discoveries pertaining to the presence of feelings in fish and insects, see, e.g., Balcombe (2016); and Goldman (2016).

24 Although, at the biomolecular level, an argument can be made that all feelings and states of consciousness depend on the inner semiotic exchange of information across cells of physiological systems. See Hoffmeyer (1996, chaps. 6 and 9).

nonhuman species handle information about their environment through conscious and unconscious processes resulting in interpretive outcomes constituting complex emotional lives. Some responses are straightforward like the feeling of excitement at the sight of a food bowl. Meanwhile, others evince an “emotional intelligence,” as we call it in humans. Two poignant examples from the animal kingdom are the way elephants mourn over the death of a companion (elephant or non-elephant), and the way pigs empathize with each other and are saddened when socially isolated.

There is a second important aesthetic feature that is primary to semiosis. It is the qualitatively creative potential of the sign. (Here I use “aesthetic” less to connote *aesthesis* and more in an artistic sense.) In the history of semiotics, Peirce made the innovative move to focus attention on the activity of signs (semiosis) as opposed to the sign as a static entity.²⁵ Signs are suggestive, or we might say, “prospective” (to borrow a frequently used term by Emerson in melioristic perspective). They determine interpretants that are themselves signs, and hence constitute ongoing processes of semiosis generating new interpretants without end. The focus on *sign-activity* provides us with an important framework for inquiring into the creative emergence of new signs in the world.

One way to further examine the creativity of the sign is by analyzing its trichotomic structure with respect to the interpretant. Here I dive into some more weeds of Peirce’s semeiotic. Peirce explains that a sign stands in relation to its interpretant either as a rheme, dicisign, or an argument. A rheme is a sign that stands to its interpretant as representing its object as a “qualitative possibility,” as “such and such a kind of possible Object” (EP 2:292);²⁶ a dicisign stands to its interpretant as representing an actual existing thing; and an argument stands to its interpretant as representing a law or sign itself. As with the three kinds of interpretants previously discussed, the elements of this trichotomy possess the interdependence of the Peircean categories: the rheme is “first,” dicisign “second,” and argument “third.” And as was the case with the emotional interpretant, *mutatis mutandis*, the rheme or rhematic aspect of the sign as “first” would be *the fundamental ground of the interpretability of the sign*. Keeping in mind its fundamental role for semiosis, I will consider the rheme from a metaphysical point of view and its central place in universal semiosis. However, first, it is necessary to fully explain the nature of the rheme as a qualitative possibility and its role in grounding any and all interpretants.

Illustrating things by way of examples helps. Peirce gives his own from formal logic: the rheme, dicisign, and argument correspond to the term, proposition, and simply argument. In a somewhat trivial sense, we observe, here, that the term is clearly “first” or foundational because it is the material from which a proposition and subsequently an argument are constructed. More importantly, from a semiotic perspective, however, a term provides *the qualitative characteristic* that enables a proposition to represent an existential fact to an interpretant. Consider, for instance, the bare terms “red” and “cat,” which connote to a person familiar with the English

25 See Max Fisch’s process oriented account of Peirce’s sense of the sign already provided in note 9; and Deely (1990, p. 11).

26 For more on the definition of the rheme, see EP 2:283 (where it is called a sumisign), 285, and SS 33-35. Peirce derived his neologism from the Greek ῥῆμα, which means “word” or “saying.”

language a positive quality or collection of attributes. In the propositions “That star is a *red giant*” and “My *cat* has calico fur,” the same terms become determined, losing vagueness; along with the other terms, they *now* function to represent a particular concrete object to an interpretant.²⁷ It is important to recognize here that while each proposition refines the meaning of its terms in this way, the terms remain the foundational semiotic element because they are meaningfully suggestive in themselves—the proposition and argument building upon their inherent suggestiveness.²⁸ This is how the rheme enables interpretation and hence why it is so important: by supplying a power of significance through indeterminate qualities. Without the rheme as a core feature of any sign, interpretation and hence semiosis would come to a standstill. With it, the generation of new signs through their interpretants in ongoing processes of semiosis have their creativity.

Back to nature. We can connect these insights about the rheme to the transcendentalist significance of nature, which I mentioned earlier. Emerson finds in the expressive sounds of the winds, colors of flowers, forms of trees, and general “mute music” of the scenic landscape a qualitatively creative power for interpretation. An observer who appreciates the appearance of such beauty or natural artistry is provoked to contemplate its potential for representing some object. Emerson has just this effect in mind when he concludes that it is *impossible* that the beauty of nature “should mean nothing.” It is impossible due to the way nature presents itself. It presents itself as significant, suggestive, or meaning-full—not necessarily in a distinct and determinate way, representing this or that object, but at least minimally so. Consider, for instance, the appeal nature makes to Thoreau in the sound of a chirruping cricket: “Deep under the dry border of some rock in this hillside he sits and makes the finest singing of birds outward and insignificant, his own song is so much deeper and more significant. His voice has set me thinking, philosophizing, moralizing at once” (THOREAU, 1961, p. 112-113). And we can continue to enrich the general idea here by adding our own illustrations, such as the night stars that suggest different constellation patterns, a sunset that inspires romantic reflections, and the gentle waving of a pine stand that arouses sublime thoughts. In these ways and countless others, nature in its qualitative character compels the generation of future interpretants—however vague or specific those interpretants may be, and in whatever form they may come, whether feelings, acts, or ideas.²⁹

To be clear, I am arguing that in these transcendentalist encounters with nature we gain an experiential sense for the real workings of a rhematic element in

27 My explanation of how the rheme functions is informed by Liszka (1996, p. 40-41).

28 Peirce says the rheme possesses a “contingent power” in itself (MS 1476:50), and that it appeals to or is “presented to its interpretant for *contemplation*” (SS 35), rather than presented as indicating or insisting upon some object. Also, later in his career, he distinguishes the “Suggestive” sign from the “Imperative” and “Indicative” signs, in his trichotomy of the way a sign relates to its dynamic interpretant (EP 2:481 and 490). Peirce’s semeiotic developed over the years, and the “Suggestive” sign appears to be the rheme in revisionary form.

29 Here we may further introduce Peirce’s idea of the qualisign, which is “first” of the trichotomy of the sign taken in itself, that is, in reference to its mode of being (see e.g. EP 2:291 and SS 32–33). The qualities of nature in themselves are potentially significant.

nature, and in its semiotic status as “first.” While this may sound to possess a tinge of mysticism, my point in fact pertains to our experiences of nature more broadly than the poetical. I have in mind all those experiences that compel human inquiry in general. Whenever we reflect about the qualitative character of nature, whether poetically, philosophically, or scientifically, we tap into its rhematic power for informing our ideas about the world. Our theoretical or practical engagements with nature are so many logical and dynamic interpretants, which necessarily depend upon and are empowered by the workings of a rhematic element as “first.” In the context of human inquiry, universal semiosis in its fullest scope comes into view, because here we begin to see the semiotic relevance of even mere physical or abiotic forms of nature: their qualitative characters, too, having the potential to suggest future interpretants.

As a final remark, I wish to continue to emphasize the rheme as a creative principle while pointing out a special semiotic expansiveness or openness found in nature. It is something to which Transcendentalism further directs our attention when describing nature in its diverse meanings capable of multivalent interpretations toward the progressive growth of new signs. Emerson sums up the idea this way, along with its metaphysical trajectory: “In nature, each individual symbol plays innumerable parts, as each particle of matter circulates in turn through every system. The central identity enables any one symbol to express successively all the qualities and shades of real being” (*CW*, IV, 68).³⁰ Emerson’s remark occurs in the context of him critiquing certain semiotic worldviews for being over-zealous because they attach a fixed meaning to individual natural signs, and thus reduce the whole of nature to a single interpretative narrative.³¹ Such a strictly defined universe of signs would be closed and static, but, for Transcendentalism, the universe is open and dynamic. I argue the same with regard to semiosis. A mountain peak seen from a valley stands as a record of geological time to a scientist, a sublime expression to a painter, and an existential challenge to a mountaineer. These different interpretants are each legitimate aspects of the complete determination of the mountain as sign. Together, they work to disclose its full rhematic potential. In Peircean terms, we can say that they jointly contribute to the “final interpretant” of the sign, which consists in a complete interpretation of it in an ultimate opinion *in futuro*.³²

We can continue to ponder the rhematic potential of nature and the way it further discloses its creative breadth by examining nature in its ecological and evolutionary modes. To continue with the example of the mountain-sign, its full interpretative possibilities will depend upon its ecological relationships, which encompass no less than all the organisms and features of the landscape interacting in meaningful ways. Furthermore, we discern that the net interpretive potential

30 The quotation is from Emerson’s chapter “Swedenborg, or the Mystic” in *Representative Men*. Emanuel Swedenborg was an eighteenth-century Swedish theologian who believed nature stood as “a symbol of spirit,” an idea that had a major impact on the Transcendentalists, consequently informing their like-minded semiotic consciousness (see GUARDIANO, 2021, forthcoming).

31 For this reason, Emerson found the symbology of Swedenborg and the typology of Puritanism to be ultimately flawed (see GUARDIANO, 2021, forthcoming).

32 For Peirce on the meaning of the final interpretant, see EP 2:496 and 498-500.

here is on the increase when taking account of the different transformations of the environment over time and the branching evolutionary paths of its diverse creatures. In nature, as the network of sign relations develops by the introduction of new forms and qualities so does the capacity for multivalent interpretants, thus increasing the overall rhematic potential of the system. And what would be the metaphysical ground for such a progressive universe of signs but a reality that is fluid, multi-layered, multi-valued, and qualitatively creative? There would be a “central identity” or an idealistic unity serving as a “commens” and enabling a network of semiotic activity where meanings can interfuse, cross-inform, and ultimately express “all the qualities and shades of real being.”

References

- ACKERMAN, Jennifer. *The genius of birds*. New York: Penguin Press, 2016.
- BALCOMBE, Jonathan. *What a fish knows: the inner lives of our underwater cousins*. New York: Farrar, Straus and Giroux, 2016.
- CORRINGTON, Robert. *An introduction to C. S. Peirce*. Lanham: Rowan & Littlefield, 1993.
- DEELY, John. *Basics of semiotics*. Bloomington: Indiana University Press, 1990.
- DILWORTH, David A. Elective affinities: Emerson’s “Poetry and Imagination” as anticipation of Peirce’s Buddhisto-Christian metaphysics. *Cognitio: revista de filosofia*, São Paulo, v. 10, n. 1, p. 43-59, Jan./Jun. 2009. Available at: <https://revistas.pucsp.br/index.php/cognitiofilosofia/article/view/13454>. Accessed on: 30 Oct. 2020.
- DILWORTH, David A. Elective metaphysical affinities: Emerson’s “Natural History of Intellect” and Peirce’s synechism. *Cognitio: revista de filosofia*, São Paulo, v. 11, n. 1, p. 22-47, Jan./Jun. 2010. Available at: <https://revistas.pucsp.br/index.php/cognitiofilosofia/article/view/13375>. Accessed on: 30 Oct. 2020.
- DILWORTH, David A. Peirce’s objective idealism: a reply to T. L. Short’s “What was Peirce’s objective idealism?”. *Cognitio: revista de filosofia*, São Paulo, v. 12, n. 1, p. 53-74, Jan./Jun. 2011. Available at: <https://revistas.pucsp.br/index.php/cognitiofilosofia/article/view/13414>. Accessed on: 30 Oct. 2020.
- EMERSON, Ralph Waldo. *The journals and miscellaneous notebooks of Ralph Waldo Emerson*. GILMAN, William H.; ORTH, Ralph H.; et al. (Eds.). Cambridge, MA: The Belknap Press of Harvard University Press, 1960-1982. 16 v. [Cited as *JMN* followed by volume and page number].
- EMERSON, Ralph Waldo. *The collected works of Ralph Waldo Emerson*. FERGUSON, Alfred R.; SLATER, Joseph; WILSON, Douglas E.; BOSCO, Ronald A.; et al. (Eds.). Cambridge, MA: The Belknap Press of Harvard University Press, 1971-2013. 10 v. [Cited as *CW* followed by volume and page number].
- FERNÁNDEZ, Eliseo. Peircean habits, broken symmetries, and biosemiotics. In: ROMANINI, Vinicius; FERNÁNDEZ, Eliseo (Eds.). *Peirce and biosemiotics: a guess at the riddle of life*. Dordrecht: Springer, 2014. p. 79-94.

FISCH, Max. Peirce's general theory of signs. In: KETNER, Kenneth Laine; KLOESEL, Christian J. W. (Eds.). *Peirce, semeiotic, and pragmatism*. Bloomington: Indiana University Press, 1986. p. 321-351.

GOLDMAN, Jason G. I'll be there for you: do insects feel emotions? *Scientific American*, September 30, 2016. Available at: <<https://www.scientificamerican.com/article/i-ll-bee-there-for-you-do-insects-feel-emotions/#>>. Accessed on: 30 Oct. 2020.

GUARDIANO, Nicholas L. The intelligibility of Peirce's metaphysics of objective idealism. *Cognitio: revista de filosofia*, São Paulo, v. 12, n. 2, p. 13-30, Jul./Dec. 2011. Available at: <https://revistas.pucsp.br/index.php/cognitiofilosofia/article/view/11602>. Accessed on: 30 Oct. 2020.

GUARDIANO, Nicholas L. *Aesthetic transcendentalism in Emerson, Peirce, and nineteenth-century American landscape painting*. Lanham: Lexington Books, 2017.

GUARDIANO, Nicholas L. Charles S. Peirce's New England neighbors and embrace of Transcendentalism. *Transactions of the Charles S. Peirce Society*, [S. l.], v. 53, n. 2, p. 216-245, Spring 2017. DOI: <https://doi.org/10.2979/trancharpeirsoc.53.2.03>. Available at: <https://www.jstor.org/stable/10.2979/trancharpeirsoc.53.2.03>. Accessed on: 30 Sep. 2020.

GUARDIANO, Nicholas L. Groundwork for a Transcendentalist semeiotics of nature. In: LAWRENCE, Marilyn; OH, Jea Sophia (Eds.). *Nature's transcendence and immanence: a comparative interdisciplinary ecstatic naturalism*. Lanham: Lexington Books, 2018. p. 77-92.

GUARDIANO, Nicholas L. Transcendentalist encounters with a universe of signs. *The American Journal of Semiotics*, [S. l.], 2021 (forthcoming).

HOFFMEYER, Jesper. *Signs of meaning in the universe*. Translated by Barbara J. Haveland. Bloomington: Indiana University Press, 1996.

IBRI, Ivo A. The continuity of life: on Peirce's objective idealism. In: ROMANINI, Vinicius; FERNÁNDEZ, Eliseo (Eds.). *Peirce and biosemiotics: a guess at the riddle of life*. Dordrecht: Springer, 2014. p. 33-49.

IBRI, Ivo A. The semiotic resilient mind: conflictual and agapic relationship between logical and emotional interpretants. *Cognitio: revista de filosofia*, São Paulo, v. 20, n. 2, p. 378-391, Jul./Dec. 2019. DOI: <https://doi.org/10.23925/2316-5278.2019v20i2p378-391>. Available at: <https://revistas.pucsp.br/index.php/cognitiofilosofia/article/view/47021>. Accessed on: 30 Sep. 2020.

IBRI, Ivo A. Reflections on a poetic ground in Peirce's philosophy. *Transactions of the Charles S. Peirce Society*, [S. l.], v. 45, n. 3, p. 273-307, Summer 2009. DOI: <https://doi.org/10.2979/tra.2009.45.3.273>. Available at: <https://www.jstor.org/stable/10.2979/tra.2009.45.3.273>. Accessed on: 30 Sep. 2020.

KRUSE, Felicia E. Nature and semiosis. *Transactions of the Charles S. Peirce Society*, [S. l.], v. 26, n. 2, p. 211-224, Spring 1990. Available at: <https://www.jstor.org/stable/40320281>. Accessed on: 30 Sep. 2020.

KRUSE, Felicia E. Peirce's sign and the process of interpretation. In: HART, Robert E.; ANDERSON, Douglas R. (Eds.). *Philosophy in experience: American philosophy in transition*. New York: Fordham University Press, 1997. p. 128-152.

LANE, Robert. Peircean semiotic indeterminacy and its relevance for biosemiotics. In: ROMANINI, Vinicius; FERNÁNDEZ, Eliseo (Eds.). *Peirce and biosemiotics: a guess at the riddle of life*. Dordrecht: Springer, 2014. p. 51-78.

LISZKA, James Jacób. *A general introduction to the semeiotic of Charles Sanders Peirce*. Bloomington: Indiana University Press, 1996.

PEIRCE, Charles S. *Collected papers of Charles Sanders Peirce*. HARTSHORNE, Charles; WEISS, Paul (Eds.), vols. 1-6. BURKS, Arthur W. (Ed.), vols. 7-8. Cambridge, MA: Harvard University Press, 1931-1935; 1958. [Cited as CP followed by volume and paragraph number].

PEIRCE, Charles S. *The Charles S. Peirce papers*. Cambridge, MA: Harvard University Library Microreproduction Service, 1963-1966. [Cited as MS followed by manuscript number and page number].

PEIRCE, Charles S. *Semiotic and signification: the correspondence between Charles S. Peirce and Victoria Lady Welby*. HARDWICK, Charles S. (Ed). Bloomington: Indiana University Press, 1977. [Cited as SS followed by page number].

PEIRCE, Charles S. *The essential Peirce: selected philosophical writings*. HOUSER, Nathan; KLOESEL, Christian; Peirce Edition Project (Eds.). Bloomington: Indiana University Press, 1992; 1998. 2 vols. [Cited as EP followed by volume and page number].

RAPOSA, Michael L. *Peirce's philosophy of religion*. Bloomington: Indiana University Press, 1989.

ROMANINI, Vinicius; FERNÁNDEZ, Eliseo (Eds.). *Peirce and biosemiotics: a guess at the riddle of life*. Dordrecht: Springer, 2014.

SHERIFF, John K. *Charles Peirce's guess at the riddle: grounds for human significance*. Bloomington: Indiana University Press, 1994.

SHORT, Thomas. L. *Peirce's theory of signs*. Cambridge: Cambridge University Press, 2007.

THOREAU, Henry David. *The heart of Thoreau's journals*. SHEPARD, Odell (Ed.). New York: Dover Publications, 1961.

DE WAAL, Frans. *Are we smart enough to know how smart animals are?* New York: W. W. Norton & Company, 2016.

WOHLLEBEN, Peter. *The hidden life of trees: what they feel, how they communicate; discoveries from a secret world*. Translated by Jane Billingham. Vancouver: Greystone Books, 2016.