Semiotics and Philosophy

Semiótica e Filosofia

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Abstract: Semiotics has not been warmly welcomed as an area of research concentration within philosophy, especially not within philosophy in the English empirical tradition. But when we consider that much of the focus of semiotic research is signification, reference, and representation, it seems evident that semiotic questions are as old as reflective thought itself. A look at how these questions have been treated throughout the history of philosophy suggests that Umberto Eco was right in claiming that most major philosophers have grappled with sign theory, if only implicitly. The theory of signs was an active area of research during the Middle Ages and John Locke opened the Modern Age with the recommendation that semiotics should be cultivated. But the philosophers of Modernity embraced a Cartesian separation between mind and body unsupportive of a robust science of signs. When semiotics emerged as a discrete field of research in the writings of Charles S. Peirce and in the semiology of Ferdinand de Saussure, it remained on the fringes of philosophy. Around mid-20th century there was a resurgence of interest in semiotics and a promising attempt was made to merge American pragmatism and semiotics with the logical empiricism of the Vienna Circle. But that effort failed and semiotics was excluded from mainstream philosophy. There is now reason to suppose that philosophy, no longer under the domination of analytic philosophy, may be moving into a new period when a weakening commitment to epistemological nominalism will make room for a return to semiotic realism. Perhaps the time is right to follow Locke's lead and to reconcile formal semiotics with philosophy—possibly heralding a new paradigm.

Keywords: History of semiotics. Scientific empiricism. Epistemological nominalism. Semiotic realism. Peirce.

Resumo: A semiótica não tem sido bem acolhida como uma área de concentração de pesquisa dentro da filosofia, especialmente dentro da filosofia na tradição empírica inglesa. Porém, se considerarmos que grande parte do foco da pesquisa semiótica é significado, referência e representação, parece evidente que questões semióticas são tão antigas quanto o próprio pensamento reflexivo. Um exame de como essas questões foram tratadas através da história da filosofia sugere que Umberto Eco estava certo em alegar que a maioria dos grandes filósofos lidaram com a teoria do signo, ao menos implicitamente. A teoria dos signos foi uma área ativa da pesquisa durante a Idade Média e John Locke abriu a Era Moderna com a recomendação que a semiótica devia ser cultivada. Mas, os filósofos

da Modernidade adotaram uma separação cartesiana entre mente e corpo que não embasa uma robusta ciência dos signos. Quando a semiótica surgiu como um discreto campo de pesquisa nos escritos de Charles S. Peirce e na semiologia de Ferdinand de Saussure, permaneceu nos limiares da filosofia. Em torno de meados do Século XX houve um ressurgimento de interesse na semiótica e uma tentativa promissora foi feita para fundir o pragmatismo americano e a semiótica com o empirismo lógico do Círculo de Viena. Porém, esse esforço fracassou e a semiótica foi excluída da filosofia tradicional. Hoje, há motivo para supor que a filosofia, não mais sob o domínio da filosofia analítica, pode estar passando para um novo período, quando um compromisso enfraquecido com o nominalismo epistemológico dará lugar para o retorno ao realismo semiótico. Talvez seja o momento de seguir a liderança de Locke e conciliar a semiótica formal com a filosofia – possivelmente prenunciando um novo paradigma.

Palavras-chave: História da semiótica. Empirismo científico. Nominalismo epistemológico. Realismo semiótico. Peirce.

Contemporary philosophers, especially those trained in the English empirical tradition, often regard semiotics as a fairly new field of research, and not always as a welcome one. However, if we concede that the principal subject for semiotic study is signification and representation, it should be apparent that, so characterized, semiotics has always been an important area of concern for philosophy. Probably one reason contemporary philosophers have been reluctant to endorse semiotics is that semioticians, themselves, have strayed from the philosophical bedrock of their field and have extended their mission well beyond the theory of signs and representation and have aligned their research more closely with a wide range of social and cultural studies than with philosophy. But even if we grant that semiotics in its current guise does not belong to philosophy, no more than psychology or cognitive science belongs to philosophy, nevertheless, there is a formal area within semiotic studies that is as much a subject for philosophical study as is philosophy of mind or theory of cognition. We philosophers do not dismiss philosophy of mind because, on the recommendation of Quine, it has embraced psychologism, nor do we disqualify theory of cognition from our seminar rooms because cognitive science has extended its mission well beyond the borders of strict philosophy. Philosophical problems by whatever names are philosophical problems, and fundamental problems in semiotics have been treated by philosophers throughout philosophy's long history.

According to the late Umberto Eco, most major philosophers have grappled with sign theory, if only implicitly, and semiotic issues have been of central concern for philosophy from the beginning (ECO, 1984, p. 4 ff.). This is well demonstrated

¹ This paper was originally presented on 18 October 2016 as a conference lecture at the 17th annual meeting of the Associação Nacional de Pós-Graduação em Filosofia (ANPOF) in Aracaju, SE, Brazil. It was written to celebrate the inauguration of the new *Grupo de Trabalho* on Semiotics and Pragmatism. It is dedicated to Lucia Santaella, Ivo Ibri, and Lauro Barbosa da Silveira, distinguished Brazilian scholars who, through their scholarship and teaching, have made Brazil a world center for the effective engagement of philosophy with semiotics.

by Winfried Nöth in his indispensable Handbook of Semiotics, which details how semiotics, in various guises, has permeated human intellectual history—so much so that, taken to the extreme, one might almost say that the history of semiotics is coextensive with the history of philosophy or even of science in general (NÖTH, 1990, p. 11). What we *can* say is that questions about the nature of signs, representation, and communication, are semiotic questions and are as old as reflective thought itself. Hippocrates regarded the study of signs, symptoms in particular, as basic for medical science. Plato's probing of the relation between names and the natural world (e.g. Plato 1892), and Aristotle's views on representation and being (Aristotle 1908), are often cited as the start of a profound semiotic inquiry running through philosophy to the present. Reputedly, it was a disagreement about the nature of signs in the works of Philodemus and Sextus Empiricus that was the focal point of the Stoic-Epicurean debate about inference (MARKUS, 1957, p. 60-83).² But according to John Deely, who has given us a massive tome on the conception of sign in the history of philosophy (DEELY, 2001), the idea of sign that is the base conception for semiotics proper was not formulated until late in the fourth century when Saint Augustine put forward a definition of sign (signum) that was general enough to be equally applicable in natural and social contexts (DEELY, 2001, p. 215).

Augustine defined sign as "a thing which causes us to think of something beyond the impression the thing itself makes upon the senses" (AUGUSTINE, 1958, p. 34). Not only does Augustine's definition bring "words and natural signs under one analytic category," it contrasts natural signs with conventional signs, like words, but also with any purposeful signs such as those used by animals to communicate, and it construes signs as being in a triadic relation with their objects (the something beyond the impression) and the intellection of the object.³ Although Augustine's general conception of signs was of such historical importance that he is often regarded as one of the founders of semiotics,⁴ his views remain somewhat unclear and quite interlaced with Christian doctrine.⁵ Deely notes, in particular, that Augustine was inconclusive about the ontological status of signs—the being proper to signs—an issue that would become crucial for the fate of semiotics as a field of study (DEELY, 2001, p. 247).

Semiotics, as a general theory of signs, was not much advanced during the following eight centuries, not until Saint Thomas Aquinas reinvigorated scholarly

² The Stoic-Epicurean debate about inference was dealt with by Peirce's student, Allan Marquand, in his contribution to *Studies in Logic*, a book edited by Peirce and consisting of papers by Peirce and his students from Johns Hopkins University (MARQUAND, 1883). See also, NÖTH, 1990, p. 16.

³ T. L. Short cautiously agrees with this account of Augustine's definition but he warns that "too much can be made of the definition's triadicity" (SHORT, 2007, p. 24); Nöth also raises doubts about the claim that Augustine's definition is genuinely triadic (NÖTH, 1990, p. 85).

⁴ Even by some as *the* founder—see NÖTH, 1990, p. 16. According to Deely, "the idea of *sign* as a general notion, which we today take more or less for granted, did not exist as a generally influential notion before the 4th century AD, when it appeared in the Latin language as a proposal in the writings of Augustine" (DEELY, 2010, p. 85).

⁵ Short states pointedly that Augustine "had no interest in founding a secular science" (SHORT, 2007, p. 24).

interest in Augustine's conception of signs. Aquinas regarded Augustine's definition as "inadequate to express the general notion of sign according to its proper being" (DEELY, 2001, p. 363), but he, too, left unresolved the question of the ontological status of signs general enough to function in either natural or conventional circumstances. Nevertheless, the critical attention Aquinas gave to Augustine's definition set the stage for three centuries of attentive development of the medieval doctrine of signs (*doctrina signorum*) as the Latin Age was drawing to a close.⁶

I should interpose here that I am using Deely's classification of "ages of understanding"—what he designates as "the Latin Age" would more commonly be called the Middle Ages, running from around the beginning of the fifth century through the sixteenth century. Deely has reframed Western intellectual history to highlight the conceptual focus of each age and to feature the development of sign theory throughout the history of Western thought. His four ages are: 1) Antiquity—ancient philosophy with its focus on *reality*; 2) the Latin Age with its focus on *being*; 3) The Modern Age with its focus on *ideas*; and 4) the Postmodern Age with its focus on *signs*. By "postmodern" Deely is not aligning himself with postmodernism in the usual sense, except insofar as he too marks a fundamental split with modernity. The principal merit of Deely's classification for my purpose is that it helps document the history of semiotics.

Returning to the development of sign theory in the Latin Age, Aquinas's contemporary, Roger Bacon, in an extensive treatise on signs (Bacon c.1267), sought to lay the theoretical foundation necessary to establish a systematic semiotics based on Augustine's general definition, but the basis for Bacon's conception of sign was Aristotelian category theory which favored a naturalistic interpretation of signs that mitigated against a truly general theory. The problem of the being of signs was acutely revealed in the opposing metaphysical views of Duns Scotus and William of Ockham—Scotus's metaphysical realism and Ockham's nominalism. According to Scotus, reality is not limited to existing particulars, but pertains as well to generals and universals. This left open ontological space for efficacious signs that are compelling not merely because of the efficient forcefulness of their signified objects or their own material embodiment. But Ockham, who we now remember for his advice that in one's metaphysics entities should not be multiplied unnecessarily, rejected Scotus's swollen ontology and maintained that existing particulars, or individuals, are the only reality and that generals and universals are creations of language that make it possible to refer to many individual things at once—they are not real but are only useful fictions. Ockham's nominalism closed the ontological space Scotus had left open for efficacious signs. The disagreement between realists and nominalists, mixed up with religious and political factions as it was, continued through the concluding three centuries of the Latin Age and was one of the truly great and consequential battles of ideas in philosophy. This battle was never finally resolved, as we shall see, and the fortunes of semiotics waxed and waned as one side or the other gained the high ground.

Only as the Latin Age drew to a close was an idea of sign formulated that fully satisfied the Augustinian condition requiring that the general conception of sign

⁶ For an extensive treatment of "the problem of sign in Aquinas" see DEELY, 2010, p. 244-253.

apply to both natural and conventional signification or, in other words, a conception of sign able to bridge nature and culture (DEELY, 2001, p. 408 and 430). It was the Portuguese Dominican philosopher, John Poinsot (John of St. Thomas), who solved the problem of the ontology of Augustinian general signs by recognizing that the being proper to signs is a pure triadic relation, in itself independent of any kind of instantiation whether material or conceptual. In 1631-1632, Poinsot published his acclaimed treatise on signs in which he defined "sign" as "that which represents something other than itself to a cognitive power" (POINSOT, 1985, p. 25). He remarked that his definition "embraces all signs, formal as well as instrumental" and explicitly contrasted his definition with that of Augustine, which he said applied only to instrumental signs (POINSOT, 1985, p. 25, n. 1). Poinsot developed his theory of signs into a systematic philosophy of experience (DEELY, 2001, p. 479) based on signs and sign action (what Charles Peirce, some 250 years later, would call semiosis or semiosy) and he stressed that sign action cannot be explained without reference to formal causality and future outcomes (DEELY, 2001, p. 472). This was an embrace of realism (at least of a moderate sort) and a rejection of nominalism. According to Deely, Poinsot opened the way for rethinking "the whole notion of knowledge and experience" (DEELY, 2001, p. 442), an approach that might have led philosophy along what Deely calls "the way of signs" instead of along the detour philosophy was about to take to follow "the way of ideas." But Poinsot's doctrine of signs, based on real relations that are independent of both thought and existing relates, was put forward after nominalism had already gained the upper hand and when the trappings of medieval philosophy were quickly being left behind. It would be over two centuries before Peirce, well acquainted with medieval thought although not specifically with Poinsot's work, would develop a semiotic theory with such revolutionary import for philosophy.7

As usually, perhaps always, happens with major paradigm shifts in intellectual history, the supplanting paradigm begins to establish itself as the supplanted paradigm winds down. René Descartes, usually honored as the father of modern philosophy, was Poinsot's contemporary and was formulating his platform for a new anti-Scholastic philosophy at the same time Poinsot futilely sought to perfect it.⁸ Descartes was an enthusiast of the scientific revolution, newly underway, and he sought to develop the methods of the new mechanistic sciences for philosophy. Peirce characterized Descartes' platform as holding that 1) philosophy must begin with complete doubt, 2) that the ultimate test of certainty is individual consciousness,

⁷ There is some scholarly disagreement over the extent to which Poinsot's views are original. According to E.J. Ashworth, there is a tendency to attribute to Poinsot achievements of Domingo de Soto (1494-1560) and she points out that Poinsot's "discussion of signs draws very heavily not only on Soto but also on the lengthy and more ontologically oriented discussion in the Coimbra commentary"; she emphasizes that Poinsot "comes at the end of a tradition, not at the beginning" (ASHWORTH, 1990, p. 45).

⁸ Descartes' *Rules for the Direction of the Mind* was published in 1628, his *Discourse on Method* in 1637, and his *Meditations on First Philosophy* in 1641. Poinsot's *Artis Logicae*, from which his *Tractatus de Signis* was drawn, was published in 1631-1632. *Artis Logicae* consisted of the first two volumes of Poinsot's five-volume *Cursus Philosophicus* which concluded publication in 1635.

3) that philosophical argument should be strictly deductive, and 4) that some things are inexplicable (EP 1:28). These tenets were all contrary to the scholastic approach to philosophy. Descartes was intent on excluding formal and final causes from the causal model for scientific explanation and resort exclusively to a mechanistic mode, thus revealing his embrace of nominalism. Because Descartes held that mind is a non-physical substance, causal interaction between mind and body could not be scientifically explained, and he bequeathed to Modern Philosophy an account of the world in which mind and matter are radically estranged (provoking some philosophers—the physicalists—to renounce mind altogether and others—the idealists—to renounce physical matter). Descartes' emphasis on the importance of clear and distinct ideas as the sole basis from which we can reason our way to knowledge, always within the confines of our individual minds, which Daniel Dennett refers to as "the Cartesian theatre" (DENNETT, 1991, p. 107), spawned what Ouine would dub "the idea idea" (OUINE, 1953, p. 48), described by Richard Rorty as "the view that language is the expression of something 'inner' which must be discovered before we can tell what an utterance means" (RORTY, 1979, p. 193). It was John Locke who first claimed that ideas are the immediate objects of experience and who elevated the idea of idea to the leading role in philosophical inquiry. David Hume would refine the "Cartesian theatre" account of mind by claiming that all we have are impressions and ideas and that ideas represent impressions simply by being weak copies of them. Clearly there is a semiotic conception trying to coalesce here but this new account of representation was an anemic conception in contrast to the richer account of representation in Poinsot, which together with real signification could actually influence the course of events. But Poinsot's potentially transformative general theory of signs was already lost to history—at least for a long time. Philosophy had turned to the way of ideas and there would be no going back.

To genuinely test Eco's claim that most major philosophers have at least implicitly grappled with sign theory, by considering the views of the major philosophers of the modern period, would be a project for a semester-long course. I'll take it for granted that as long as we can agree that grappling with theories of representation is at least implicitly grappling with sign theory, then it is pretty obvious that Eco's claim is justified. For a good overview of the thread of sign theory implicitly running through all the schools of modern philosophy, again I recommend Nöth's *Handbook of Semiotics*. I'll mention a few examples to illustrate the point but I will limit my purview to a somewhat narrow path through the modern period of Western philosophy. I will do this because, in what follows, my focus will be on the fate of semiotics as a discrete area of investigation in the English empirical tradition and, in particular, the analytic tradition. I am limiting my purview this way because it was within the English empirical tradition that semiotics as a general science of signs resurfaced and began to assume a place of central importance within mainstream philosophy—only to be banished and disparaged after the mid-20th century.

Before taking up that story, I'll run through my examples of how major philosophers of the modern period grappled with sign theory—constrained as they were by their nominalist predilections. Most of the early moderns recognized the importance of signs and dealt directly with sign theory to some extent. According to Hobbes, signs are the "relata in the association of antecedent with a consequent" (NÖTH, 1990, p. 23), a view that would be echoed by Hume who wrote that "A Sign

is nothing but a correlative Effect from the Same Cause" (HUME, 1750, p. 125n.). Hobbes distinguished between natural signs, where the underlying causal relation is "independent of the human will," and arbitrary signs, which are signs of our conceptions and not of things themselves (NÖTH, 1990, p. 23).

John Locke, born in 1632, the year when Poinsot's treatise on signs was published, recognized the fundamental importance of signs as one of the three principal constituents "within the compass of humane understanding" (LOCKE, 1690, p. 361). Locke recommended a three-fold division of science into natural philosophy, ethics, and the doctrine of signs, which he equated with logic, broadly speaking, just as Poinsot had and as Peirce would over two centuries later. It was Locke who gave the name *semiotics* to the philosophical study of signs, the "business whereof, is to consider the nature of signs, the mind makes use of for the understanding of things, or conveying its knowledge to others" (LOCKE, 1690, p. 361). Since only what is in the mind is "present to the understanding," it follows that whatever is external can only be contemplated by way of signs or representations, which Locke called ideas (LOCKE, 1690, p. 362). Contemplating one's own ideas or conveying ideas from one mind to another also requires the use of signs, typically words, which are signs of ideas. 11

George Berkeley rejected Locke's distinction between external things and internal ideas, admitting only ideas, all of which are particular. He held the extreme nominalist view that words only become general *in effect*, as signs of many particular ideas at once. Nöth has pointed out that Berkeley's idealistic principle, "to be is to be perceived," reinterprets nature in terms of semiosis: "The connection of ideas does not imply the relation of cause and effect, but only a mark or *sign* with the thing *signified*. [...] the noise that I hear is not the effect of this or that motion [...], but the sign thereof" (NÖTH, 1990, p. 25, quoting BERKELEY, 1710, §65). But Berkeley did take notice of Locke's proposal that the doctrine of signs should be pursued, claiming even that "if duly considered," it "would cast no small light upon things, and afford a just and genuine solution of many difficulties." Berkeley astutely observed that in addition to suggesting ideas, signs may raise "proper emotions," produce "certain dispositions or habits of mind," and direct "our actions" (BERKELEY, 1732, p. 360; quoted in DEELY, 2001, p. 592).

I have already mentioned David Hume's parsimonious inventory of mental contents—nothing but impressions and ideas, which are themselves only weak

⁹ Locke made this recommendation at the end of Book 4 (Chap. 20, p. 361 in the first edition) of his famous *Essay Concerning Humane Understanding* (LOCKE, 1690). In later editions it came at the end of Chapter 21.

¹⁰ Locke used the Greek word, Σημιωτική, in all of the editions of his *Essay* that he personally oversaw. Later editions often substituted Σημειωτική (with an epsilon following the mu), the accepted spelling for the medical science concerning symptomatology. It is supposed that Locke used Σημιωτική deliberately to indicate that he was proposing a new name for the Latin science *doctrina signorum*, which he wanted to distinguish from the medical science, Σημειωτική. (Information on editions of Locke's *Treatise* taken from *World Heritage Encyclopedia*.) Deely notes that the Latin transliteration of Locke's Σημιωτική is *semiotica*, which in English become *semiotics* (DEELY, 2001, p. 595).

¹¹ See NÖTH, 1990, p. 24 on Locke's apparent failure to recognize that words are ideas.

impressions—and his Hobbesian causal explanation of signs, which according to Thomas A. Sebeok, "transformed the notion of 'sign' into the notion of 'cause'" (SEBEOK, 1991, p. 116). This was hardly the basis for a robust theory of signs. But even though Hume's skepticism kept him from seeing any semiotic link between ideas and objects external to the mind, he did regard ideas as copies of either antecedent impressions or antecedent ideas (ADAMS, 1991, p. 64)—an account of signs that bears resemblance to the nominalist semiotic views of Ockham. Hume's Scottish compatriot, Thomas Reid, developed a much richer theory of natural signs, where "connection between the sign and thing signified" is established by the course of nature, and artificial signs, where the connection is established "by the will and appointment of men" (REID, 1997, p. 177). In order to know things by signs, Reid held that "the appearance of the sign to the mind" had to be "followed by the conception and belief of the thing signified," and that there are three ways to make this connection: "by original principles of our constitution, by custom, and by reasoning" (REID, 1997, p. 177). Hume was not convinced, and told Reid that "there seems to be some defect in method," and that he suspected Reid of accepting the rationalist doctrine of innate ideas.12

Hume's objection to Reid's rationalist sympathies underscores the division between the two main early streams of modern thought, the empirical and rationalist traditions. But whether rationalists, like Descartes, Spinoza, and Leibniz, or empiricists, like Locke, Berkeley, and Hume, they were in general agreement about applying a scientific approach to philosophy and about the priority of reason. They were the progenitors of the Enlightenment. There was disagreement about whether experience was the only source of ideas but there was general agreement that ideas are representations of objects which are themselves ideas, and that experience cannot take us any deeper (DEELY, 2001, p. 501). It was the preeminent Immanuel Kant who succeeded in reconciling empiricism and rationalism by accepting the principal claims of both views: "concrete, sensible percepts supply the 'matter' of human thought, while a priori, universal ideas supply its 'form'" (GRAVES, 2016, p. 186). But the universality of the forms, or schemata, is conceptual and not something that exists in nature. Human understanding never makes contact with things in themselves and such objective reality as we have is conceptual at its base. There are many respects in which Kant may be seen to be dealing implicitly with sign theory, including of course his famous distinction between analytic and synthetic judgments (OTTE, 2006, passim). But perhaps none of his quasi-semiotic ideas was more pioneering than his theory of schemata, something Peirce believed deserved more development than Kant gave it (CP 1.35), and which has been dealt with in depth, from the standpoint of Peirce's semiotics, in Eco's book, Kant and the Platypus (ECO, 1997).

Modern philosophy bifurcated in response to Kant. On the one hand, German Idealism, led by such giants as Fichte, Schelling, and Hegel, paved the way for what formed into the Continental tradition, which for a long time dominated European philosophy. On the other hand, the English empirical tradition, more focused on problems related to Kant's ethics and his analytic/synthetic distinction,

¹² From a letter of 4 July 1762 to Hugh Blair. Apparently Blair, at Reid's request, sent Hume an advance copy of parts of the *Inquiry* and asked for Hume's judgment. The letter is published in REID, 1997, p. 256-257.

sought conceptual clarity through close analysis of concepts and language, and developed formal logical practices aimed at avoiding metaphysical ambiguities. By the early $20^{\rm th}$ century this second branch of modern philosophy was coalescing into the analytic tradition.

I have not assembled a list of analytic philosophers who best support Eco's claim that semiotic issues are ubiquitous to our discipline but I am sure you can easily come up with your own examples of important 20th century analytic philosophers who have devoted much of their intellectual effort to philosophy of language or problems involving representation, reference, or intentionality (which are semiotic problems by other names). Most of us would cite Wittgenstein, perhaps noticing his idea of "language on holiday" or his provocative remark that "Every sign by itself seems dead." "What gives it life?" he asks. "In use it is alive," he answers, and wonders if use is what breathes life into a sign (Philosophical Investigations, § 432). Wherever we look, we find examples of major analytic philosophers who have dealt with semiotic problems. Consider Russell's work on denotation (RUSSELL, 1905), and his idea of definite and indefinite descriptions (RUSSELL, 1910-1911). Or consider Quine's landmark book, Word and Object, and his puzzle of the indeterminacy of translation (QUINE, 1960, p. 26ff.)—and Davidson's related idea of radical interpretation (DAVIDSON, 1984, p. 125-139). It might be more difficult to isolate analytic philosophers who have not dealt seriously with issues we can identify with semiotics than those who have. Try as they might to avoid "ontological presuppositions about mental entities" in formulating their epistemological and cognitive theories (e.g. DENNETT, 1969, p. 19ff.), our analytic luminaries inevitably faced problems of reference and intentionality. Around mid-century, after computing began to emerge as the prototype for thinking, and AI became the vogue, the problem of representation became acute. According to Margaret Boden, "the central theoretical concept in AI is representation" (BODEN, 1987, p. 50) and, now, the term "representational theory of mind" has come to be used almost interchangeably with "computational theory of mind." Fred Dretske's "representational thesis" states forthrightly that all mental facts are representational facts (DRETSKE, 1995, p. xiii). But while those of us who are conversant with semiotics recognize its substantial footprint across the landscape of analytic philosophy, analytic philosophers themselves are mostly blind to this congruence. I am reminded of Thomas Sebeok's frequent reference to Molière's Monsieur Jourdain, who when told that he spoke in prose replied that he had no idea he spoke prose at all (MOLIÈRE, 1670, act 2, scene 6). According to Sebeok, contemporary philosophers, and scholars in general, like Molière's Jourdain, are unwitting of the fact that they are frequently occupied with semiotic problems. Sebeok called this "the Jourdain factor" (SEBEOK, 1991, p. 45). One of the great ironies of contemporary philosophy is that philosophers who honor John Locke as a forefather, and revere him as a hero of empiricism, have completely forgotten, or completely ignore, his recommendation that we cultivate semiotics, which he declared, if "duly considered [...] would afford us" a new "logic and critic" (LOCKE, 1690, p. 362).

The development of the conception of signs and sign processes in the history of philosophy, and the movement toward a general theory of signs, such as that

¹³ See the entry for "Mental representation" in the Stanford Encyclopedia of Philosophy.

envisioned by Poinsot and Locke, is known to but a few who study the history of ideas. For most of us today, when we think of semiotics as a discrete field of research we think of it as a late-comer to the philosophical sciences, if we think of it as a philosophical science at all. It is usually said to have emerged in full only in the late 19th and early 20th centuries in the writings of Charles S. Peirce and in the semiology of Ferdinand de Saussure. During much of the mid-20th century it was Saussure's language-focused semiology and its development in the writings of Jakobson, Lévi-Strauss, Lacan, Barthes, Greimas, Foucault, Derrida, Kristeva and many others, that dominated the burgeoning field of sign studies—and *that* tradition has contributed massively to our knowledge of linguistic signs and practices—but gradually a more general semiotics, based on Peirce's conception of signs and semiosis, emerged as the more fruitful and comprehensive approach.

Peirce's inspiration for developing semiotics as a specific field of study was John Locke. ¹⁵ Peirce understood, as Poinsot had, that the being proper, or basic, to signs is a pure triadic relation and, as had both Poinsot and Locke, he equated semiotics more with logic than with language and regarded it as a general and

¹⁴ See DEELY, 2001, p. 700-705, for a review of views on the question of whether semiotics is a field of study or a discipline, but Deely's own opinion is that both conceptions apply depending on whether "semiotics" refers "primarily to the development of what Peirce and Locke called the 'doctrine' or theory of what a sign is, and the conditions for anything to be a sign" (p. 702), in which case semiotics is a discipline and is *theoretical*, or whether "semiotics" consists in "the development of attempts to isolate and pursue the implications of specifically signifying aspects and elements of phenomena that are studied in their own right by the range of traditional specialized pursuits [...], or that are involved in the specific production of signifying phenomena in the various areas" (p. 702-703), in which case semiotics is a field and is *applied* and "brings into focus the inherently interdisciplinary ramifications of the possibility of success in developing a unified theory of signs" (p. 703).

¹⁵ Deely suggests that Peirce might have "picked up the trail of the sign" from the Latins from "Scotus in particular, but also from Fonseca and the Conimbricenses" (DEELY, 2001, p. 613). Indeed, as early as 1867 Peirce had taken a definite interest in mediaeval logic and had made careful note of available scholarly works in the Harvard library; he had even purchased early editions of Duns Scotus for his personal library (FISCH, 1984, p. xxiv). But Peirce had become acquainted with the British empirical tradition some years earlier and by 1865, when he delivered his Harvard Lectures on the Logic of Science (W 1:162-302), he made particular reference to Locke's discussion of logic in his Essay Concerning Human Understanding and stressed the importance of conceiving of logic as a science of signs, especially symbols. The usual assumption that it was Locke's proposal at the end of his Essay that inspired Peirce to take up the doctrine of signs as a study of logic seems very well founded. Peirce was inconsistent in his choice of a name for this field of study but usually used either "semiotic" or "semeiotic." According to Max H. Fisch, "semeiotic" was Peirce's preferred spelling but, as Mats Bergman has pointed out, Peirce's more frequent use of the "semiotic" spelling, without the second "e", casts pragmatic doubt on Fisch's claim (BERGMAN, 2009, p. 166, n.1). It is possibly of relevance that Peirce's personal copy of Locke's Treatise was the 1795 Bathurst edition which incorporated the mistakenly emended spelling Σημειωτική, instead of Locke's consistent choice of Σημιωτική, without the epsilon following the mu. It is not known whether Peirce was aware that this nonauthorial emendation had been made after Locke's death.

formal science of signs that is normative, not descriptive. Peirce's theory of signs is too intricate and comprehensive to be easily encapsulated but a brief overview will help frame the remainder of this essay. 16

According to Peirce, every sign is in a special kind of triadic relation with the object that it represents and with what he calls its "interpretant," the effect the sign has on its interpreter. Put more simply, signs mediate between objects and interpretations. We can have direct dyadic experience of external objects but not intellectual experience; we cannot know directly. Intellectual experience is always triadic—sign mediated. The semiotic triad (object-sign-interpretant) belongs to the category Peirce calls "thirdness," which, in his view, constitutes mind; signs are the medium for thought or, as he said, all thought is in signs. Here Peirce turned from the modern account of thinking as some kind of awareness of ideas in the mind, the "idea idea," to an externalist view of thinking as semiosis, where every thought (that is, every sign) is "directed" toward its object. This view bears resemblance to that of Brentano, who held that mental phenomena always exhibit intentionality or directedness toward an object (BRENTANO, 1973, p. 88).¹⁷ But even more importantly, in semiosis every thought/sign is directed toward its interpretant, so that the object really affects the interpretant through the mediation of the thought/ sign. Semiosis is semiotic causation.

Semiotics divides into three branches: *speculative grammar*, which deals with what is requisite for representation of any kind, *critic*, which deals with the relations of signs to the objects they represent, and *speculative rhetoric*, which deals with the relations of signs to their interpretants (or to the effects of the signs). This division of labor in semiotics is obviously related to the triadic nature of the sign relation. The first division focuses on the sign as such. The second division, building on the results of the first, focusses the reference of signs to objects. The third division, building on the results of the two preceding divisions, focusses on interpretation of signs, or on the effects of signs on interpreters (not necessarily persons). There is an interesting parallel between these divisions of semiotics and the perhaps more familiar triad: syntax, semantics, and pragmatics.

Peirce believed that the key to intelligence of any kind is semiosis, or sign action, and he formulated an elaborate semiotic theory to facilitate the analysis and classification of signs. Peirce's division of signs into icons, indexes, and symbols is his best-known semiotic bequest—although his distinction between tones, tokens, and types is also widely used—but these are only two of many triads that permeate his philosophy. Peirce understood, as Poinsot had but Locke had not, that the sign relation extends through time and always takes aim at future outcomes. Semiosis is a form of final causation (see SHORT, 2007b, p. 669 and HULSWIT & ROMANINI, 2014). I will say just a little more about this, and why it is so important, in my concluding remarks.

Although Peirce was born during the prime of the modern period of philosophy and was nurtured mainly in the English empirical tradition, he was well-learned

¹⁶ Parts of this overview have been extracted, with revisions, from HOUSER, 2010.

¹⁷ See SHORT, 2007(a), p. 6-11, and 2007(b), p. 669, for reference to Peirce's views in comparison with Brentano's idea of intentionality. See SMITH, 1994, Chap. 2, for an examination of Brentano's intentionality thesis in relation to its Aristotelian roots.

in both ancient and medieval thought, and did not succumb to the nominalist predilections of his own age. This would stir up some resistance to Peirce's ideas as the analytic movement became dominant, but his genius was undeniable and his powers of analysis so profound that he could not be ignored. Besides, Peirce's thought was so conformant with the physical science of his time, even ahead of his time, and his mathematical and logical expertise was so advanced, that it is possible to regard him as a progenitor of the analytic approach to philosophy. For a brief time around mid-20th century, there was a promising attempt to merge American pragmatism and semiotics with the logical empiricism of the Vienna Circle, which would have brought Peirce's semiotics into the mainstream of modern empirical philosophy. That attempt failed and semiotics was sent packing—foreclosing the chance of moving philosophy into what Deely calls the postmodern age long before most of us were born. That is the story I will now briefly recount and I'll conclude with some thoughts about why philosophy needs semiotics.

When Peirce died in 1914, his comprehensive theory of signs was not well known, and was certainly not conceived of as a discrete field of research, but those who did know of it understood that it was groundbreaking. Harvard philosopher, Josiah Royce, was the chief proponent of Peirce's semiotic theory in the United States. Among Royce's influential students were Morris Cohen, C. I. Lewis, Henry Sheffer, and George Herbert Mead. The English linguist and philosopher, C. K. Ogden, had learned about Peirce's semiotics from Victoria Lady Welby, with whom Peirce had carried on an extensive correspondence, and in 1923 when Ogden and I.A. Richards published their influential book, The Meaning of Meaning, they included a twelve-page appendix on Peirce's sign theory and adopted Peirce's category of "interpretation" as "the central concept" of their own theory of meaning (ECO, 1989, p. xi). Ogden's and Richard's "semiotic triangle" (OGDEN and RICHARDS, 1989, p. 11), which bears structural similarity to Peirce's semiotic triad, helped effect the "linguistic turn" in 20th century British philosophy. 18 Fifteen years later, Charles Morris, a student of Mead, published his monograph, Foundations of the Theory of Signs, as the second number of the famous International Encyclopedia of Unified Science (MORRIS, 1938b). The Encyclopedia was a product of the Unity of Science Movement, founded by Otto Neurath to further the goals and precepts of logical empiricism. 19 American supporters of Neurath's movement facilitated the immigration of many leading philosophers of science to the United States during the troubled times of the 1930's, including Herbert Feigl, Rudolf Carnap, Karl Menger, Carl Hempel, Hans Reichenbach, Felix Kaufman, Gustav Bergmann, Philipp Frank, and Kurt Gödel (REISCH, 2005, p. 8-9). These émigrés, most of them members of the famous Vienna Circle, became the anchors for analytic philosophy in America, which at the time was still under the spell of the first wave of pragmatism. Some American

¹⁸ According to Eco, the semiotic triangle of Ogden and Richards "apparently translates" Peirce's semiotic triad (ECO, 1979, p. 59). But Pieter Seuren reminds us that the linguistic triad represented in the semiotic triangle derives from Aristotle (SEUREN, 2010, p. 26). See the entry for Charles Kay Ogden in *Wikipedia* re the linguistic turn; also see STURROCK, 2004.

¹⁹ For an excellent brief introduction to the Unity of Science Movement, see REISCH 2005, ch. 1.

pragmatists, Charles Morris among them, felt the siren call of logical empiricism and tried to merge the two approaches (MORRIS, 1938a, p. 67-71; SCHILPP, 1963, p. 860). In his monograph, Morris, following Peirce's lead, promoted semiotics as a tripartite science that addresses the three dimensions of semiosis, or sign functioning: the syntactical dimension, the semantic dimension, and the pragmatic dimension.²⁰ Morris claimed that "Semiotic holds a unique place among the sciences. [...] [It] is not merely a science among sciences but an organon or instrument of all the sciences" (MORRIS, 1938b, p. 56). Through the influence of Morris, Carnap expanded his treatment of semiotic structure and was persuaded to add pragmatics to his categories of syntactics and semantics (CARNAP, 1939, p. 4-5), and he acknowledged that it was Peirce who had initiated the focused investigation of the pragmatic component of language (SCHILPP, 1963, p. 868). In his entry for "semiotic" for the 1942 edition of Dagabert Runes Dictionary of Philosophy, Carnap said that semiotic was "a theory of signs and their applications [...] developed and systematized within Scientific Empiricism" (CARNAP, 1962b), the philosophical movement formed by merging the logical empiricism of the Vienna Circle with American pragmatism (SCHILPP, 1963, p. 860). He predicted that the exhaustive development of language analysis within Scientific Empiricism would lead to "a comprehensive general theory of signs or semiotic as a basis for philosophy" (CARNAP, 1962a). Semiotics was being hailed as a promising candidate for providing the theoretical structure "simple in outline" yet "comprehensive enough" to unify the many sciences.

So, around mid-20th century, pragmatism and semiotics appeared to be on the verge of being absorbed into mainstream empirical philosophy, at least into the nascent analytic movement rapidly blossoming in the United States at that time, and it appeared that Peirce would be accepted into its family tree. But as we know, that didn't happen. Not only was semiotics not absorbed into mainstream philosophy, it was effectively banished from the discipline. The reason for this is complicated but a principal factor was the changing ethos of analytic philosophy in America following World War II as its focus of interest narrowed to research programs dominated by formal logic and meta-considerations and the broader goals of the Unity of Science Movement were abandoned. The reasons for the retrenchment of analytic philosophy were partly political and partly practical but there were theoretical reasons as well.

Chief among the political factors were the Cold War and McCarthyism. The philosophers of the Unity of Science Movement tended to be liberal with an interest in social reform, many with socialist leanings, and that posed a political problem for the nascent analytic philosophy movement in the United States given the reactionary politics of the Cold War period. The movement's response was to minimize normative interests and to become rather staunchly apolitical—in Neurath's telling phrase, to opt for "a withdrawn existence on the icy slopes of logic" (see REISCH, 2005, p. 344). Probably the main practical reason for the narrowed focus of the analytic movement concerned funding. There were generous funding opportunities for ostensibly apolitical research projects in logic and computing science and in some meta-areas of philosophy and, as we are all well aware, the research profile of our discipline is significantly shaped by available funding.

²⁰ I have treated Morris's introduction of semiotics to the Unity of Science Movement and his influence on Carnap in some detail in HOUSER, 2002.

The theoretical reason for evicting semiotics from philosophy was that it violated deep-seated tenets of the crystalizing temper of analytic philosophy. Although semiotics and pragmatism resonated with analytic philosophy in some key respects, there were disqualifying differences. The naturalism of pragmatism is not constrained, as is that of analytic philosophy, by an unvielding physicalism and scientism, nor does pragmatism make the sharp distinction made by analytic naturalists between factual statements and value judgments. Even more problematic for analytic philosophers, who whole-heartedly adopted the logical positivists' antipathy for metaphysics and teleology, were the underlying ontological and teleological currents in Peirce's semiotic thought. Semiotics, and the idea of sign action, at least as found in Peirce, could not in the end be tolerated by positivist analytic philosophers. Even within the Unity of Science Movement itself resistance to semiotics developed, mainly due to Neurath who hated semiotic terminology and complained that "the tripartite structure of semiotic" was too Kantian (REISCH, 2003, p. 206). Conveniently, ordinary language philosophy, with manifest ties to the Vienna Circle, was gaining influence, and because it addressed many of the linguistic or semiotic questions dealt with by pragmatic semioticians it lessoned the perceived need for semiotics. Finally, the new modus operandi of philosophy was to abandon comprehensive and historical approaches and to follow the example of the specialized physical sciences, which tended to deal with isolated problems building exclusively on the latest research. (When I was a graduate student in a department heavily weighted toward analytic philosophy, I was advised by a well-respected logician never to waste my time on philosophical articles that were more than ten years old.) So, after a promising union with philosophy, semiotics, as a systematic field of study, separated from philosophy and moved in part to linguistics, where Saussure's semiology quickly gained dominance, but it also formed into a separate interdisciplinary field of study established in large part by Morris's student, Thomas Sebeok, and his followers, most of whom adhered to Peircean sign theory.²¹ In the late 1970's, I became acquainted with a member of the cadre of philosophers who were recasting analytic philosophy of mind in the computational argot of Artificial Intelligence. My colleague asked me about my graduate work, and I said I was planning to write my dissertation on a problem in philosophy of mind, with a focus on Peirce. He advised against it. He warned me that, because of academic renegades like Sebeok, Peirce was becoming known as a semiotician, and that it would damage my chances for a career in philosophy to become associated with semiotics. The separation was complete and seemingly irrevocable.

Nevertheless, as we know, time moves on, and in the words of the poet, William Cullen Bryant, who Peirce liked to quote, "Truth, crushed to earth, shall rise again" (BRYANT, 1905), at least that is our hope and in this case that hope seems justified. For over the course of the last generation, even as analytic philosophy has in some respects become more wide-spread, its hegemonic hold on Anglophone philosophy has weakened and other traditions, pragmatism in particular, have resurfaced with a sustaining robustness. And even as analytic philosophy has become more international, continental philosophy has found more acceptance across the

²¹ For views of Morris and Sebeok on the history of semiotics see, for example, MORRIS, 1955, p. 285-287, and SEBEOK, 1976, p. 3-26 and SEBEOK, 1991.

oceans (and maybe a little even across the Channel). No longer the only game in town, analytic philosophy has somewhat moderated its stringent regimen. Some of the more resolute analytic naturalists have followed their scientistic convictions out of philosophy altogether into cognitive science, or neuroscience, or other scientific fields where reductive physicalism remains practically unquestioned. But within philosophy there seems now to be a trend away from logic-centrism and unyielding scientism and a return to a more pluralistic orientation more welcoming of normative and social thought, and even the history of ideas. In recent years, even a few *acknowledged* semiotic ideas have entered the mainstream through the writings of Terrence Deacon and others—including European philosophers like Habermas and Apel, whose work bridges the analytic-continental divide. The time may be right for reestablishing semiotics as a bona fide area of research in Anglophone philosophy and to reconsider the overall importance of semiotics for philosophy in general.

But, you may ask, if what I have been saying is true, if from the beginning philosophers have been grappling with sign theory, even if only implicitly, and if throughout the modern age semiotic problems about meaning, belief, truth, language, representation, denotation, reference, interpretation, intentionality, agency, and so on, have been dominant concerns, then don't we already have whatever semiotics we need? Why do we need a separate area of research within philosophy focused on sign theory—only to give the name semiotics to a lot that we already do? This gets to the heart of the matter. The very fact that philosophy is so replete with issues and questions we can identify with semiotics suggests that there is a common core of theory to be sorted out. One of the legacies of analytic philosophy is the advancement of logic and its exacting, some would say unrelenting, application to just about every problem of philosophy. The justification for this heavy reliance on logic is that rationality and inference are ubiquitous throughout thought and experience. But logic, especially formal logic, touches only the thinnest denatured core of human experience and endeavor and doesn't reach a lot that makes life meaningful and satisfying—that is no doubt partly why analytic philosophy has been neglectful of normative and aesthetic concerns. Analytic philosophy would have done better to follow Locke's recommendation to cultivate semiotics, which Locke said would give us a new logic and tool for analysis. Peirce, following Locke's recommendation, developed a comprehensive theory of signs of which critical logic is only a branch and Morris and Carnap, both deeply familiar with formal logic, chose semiotics as a unifying basis for philosophy and, in Morris's words, "an organon or instrument for all the sciences" (MORRIS, 1938b, p. 56). Of course it is true that analytic philosophers made important contributions to the semiotic problems they dealt with under other labels—who would dare say, for example, that Russell did not make major progress toward unraveling the problems of reference or that Quine did not significantly advance our understanding of linguistic meaning with his theory of semantic holism? But should we not admit that if there is a theory more general and comprehensive than analytic logic, which also deals with reference and linguistic meaning, then it is too bad that Russell and Quine did not work within that potentially richer theoretical context. Semiotics, in the tradition of Peirce, is such a theory.

But the advantage of semiotics over the logical, linguistic, and epistemological theories of analytic philosophy is not just that it is more general and comprehensive.

Semiotics reopens some avenues of understanding and explanation that were closed in the 17th century with the ascendance of modern philosophy in the wake of the scientific revolution. The reasons for evicting semiotics from analytic philosophy, already enumerated, were constraints imposed by the dogmas and predilections of modern philosophy's *way of ideas*. To repeat, those dogmas and predilections include an unyielding nominalism, a commitment to physicalism verging on reductive materialism, a rejection of teleology and an exclusive reliance on efficient causality, and a sharp distinction between facts and values resulting in a virtual dismissal of values as philosophically irrelevant. Many of these constraints are the result of a radical adherence to the principle of parsimony—or, we might say, a heavy handed application of Ockham's razor.

Let me be clear: to readmit semiotics into philosophy would conflict with most of these dogmas and predilections. In accordance with the Peircean semiotic theory that I endorse, signs have a reality that is not reducible to their physical embodiment and sign action (semiosis) involves formal or final causation and is not deterministic. The nominalism of Ockham is rejected and replaced with a metaphysical realism which does not equate reality with existence and which acknowledges the reality of generals and laws. Before such an intellectual conversion can come to pass a lot of minds will have to change for, without exaggeration, it would amount to a major paradigm shift. That is why John Deely separates the modern age, the way of ideas. from what he calls the postmodern age, the way of signs. The paradigm shift to this new age of understanding has yet to culminate but the spadework is finished and there are indications that it may be underway. But if, as I profess, semiotic realism reopens avenues of understanding that nominalist empiricism closed, what are those avenues? What might we expect from a fuller and more consistent application of semiotic analysis to philosophy? I will give a brief and speculative answer in closing but I must caution that reopening avenues of understanding that have effectively been closed may seem to some to be a retrograde move—whether or not that is so will have to be worked out over time.

Consider, for example, the mind-body problem as inherited from Descartes, who famously held that minds and bodies are both substances but that mental substance has no extension in space while physical substance has. The function of mind is to think and the function of physical matter is to occupy and move through space in accordance with physical law. The problem with this dualistic account is the connection between mind and body: how can mind interact with matter? Descartes postulated that there can be a causal interaction between minds and brains (somehow transacted in the pineal gland), and that ideas, on the one hand, and physical brain states, on the other, result from those causal interactions. Activated brain states can generate causal chains of physical activity. The difficulty with this account is that Descartes, and the modern philosophy that followed, admit only efficient causation into their etiological arsenal and, almost by definition, mind as a non-extended substance is exempt from physical law. The solution to this problem within analytic philosophy has been to deny dualism, usually by adhering to an unyielding physicalism that requires either equating mental states with physical states or else denying that mental states really play a non-reducible role in the course of events.

In 1960 Hilary Putnam revived what appeared to be a form of dualism when he imported the distinction between hardware and software into analytic philosophy of mind but the computational theory of mind that took shape during that period continued to labor under the constraining adherence to the causal closure of the physical. Were philosophy to transition from epistemological nominalism to semiotic realism, the Putnam analogy could be reformulated to rectify Descartes' dualism. In Peirce's philosophy of mind, the analog of Putnam's software is neurological habit so that instead of conceiving of mind as a complex of computer programs Peirce conceives of mind as a relational network of signs and interpretive habits (which, in effect, are stored programs) acquired to prepare host organisms for future experiential interactions.²² Unlike computer software, these habits, developed in the give and take of actual experience, function as general rules of action to govern future behavior, not by means of efficient causality but semiotically through formal or final causality.²³ Of course the habits that govern future behavior have to be embodied (typically in brain states), but, like Putnam, Peirce held that the mind is independent of its embodiment.

So if we accept semiotic realism we will once again confront the mind-body problem but in a new form and with new tools for dealing with it. Peirce admitted that though he had no doubt that mental states (signs) could somehow guide physical compulsion toward ends of a certain type, he couldn't explain how.²⁴ But he was confident that the answer would involve teleology and semiosis—not some mysterious movement within the pineal gland.²⁵

I will say just a little more about teleology because that, too, is a matter poorly dealt with in analytic philosophy where it is acknowledged that, *although* it is rational to act for the sake of purposes or goals, the causality involved in goal-directed action can always, it is supposed, be reduced to efficient causality (WHITE, 2013). Reductionists from Karl Marx to Daniel Dennett credit Darwin with having laid teleology to rest (DENNETT, 1995, p. 25, 62). But resistance to this reductionist conclusion is growing and the nominalist dogma of the all-encompassing reach of efficient causation, along with the commonly associated deterministic metaphysics,

²² According to Peirce, "the essential function of a sign is to render inefficient relations efficient,—not to set them into action, but to establish a habit or general rule whereby they will act on occasion" (CP 8.332).

²³ For treatments of semiotic causation see SHORT, 2007a, p. 171 ff., HULSWIT & ROMANINI, 2014, and RANSDELL, 2013.

²⁴ As he wrote to F. C. S. Schiller in 1906, how "logical sequence is converted into mechanical sequence [...] we are in my opinion as yet entirely ignorant" (CP 8.320).

²⁵ The framework Peirce describes in which this process of semiotic causation unfolds seems to be something like this: We imagine some possible future event that we might encounter in the course of experience and a possible response likely to yield an outcome (an end-state) that we value above alternatives. This imagining involves generals (icons which, in themselves, are possibilities) which activate actual neural states and processes thus tending to establish a real (habitual) connection (a resolve or determination—a rule of behavior) between the generalized icons of the desired/hoped for outcome and the kind of action required to bring it about so that when we do actually encounter a circumstance, the perception of which registers as the type of event we sought to prepare for, a developed neurological habit (self-determined in this case but presumably of a kind with more common natural—unintentional—determinations) triggers a response in the form of (iconically like) the action programmed to bring about/cause the desired outcome.

seems more and more to be blocking the way of inquiry. This is especially evident in biology where for at least two decades a movement has been building to reconsider the etiological constraints on biological explanation. Biosemiotician, Jesper Hoffmeyer, for example, refers to "a kind of self-organization that cannot be explained through any generative causal law but instead demands a historical explanation of the phenomenon as an effect of the conjunction of circumstances that produced it"—he calls this "semiotically situated interaction" (HOFFMEYER, 2008, p. 229). There has also been an increasing reliance on variants of formal and final causation, characterized this way by another biosemiotician. Søren Brier: "formal causality works through pattern fitting" and "final causation is semiotic signification and interpretation" (BRIER, 2008, p. 241). He attributes this understanding to Peirce who lucidly explained that with final causation "it is the end, a result fitting a general description, that somehow determines the compulsion to bring it about by whatever means possible" (CP 1.211-12), and Peirce believed that typically "whatever means possible" involves an element of chance. So here, again, we find that semiotics reopens an avenue of investigation that analytic philosophy closed.

I'll sketch one final area of philosophical interest that has received limited attention in analytic philosophy but which is reemerging as a topic of considerable importance, and one that I believe can profit from semiotic analysis. It is what within analytic philosophy is often referred to as the problem of normativity. To what extent normativity is a problem is debatable but it does remain perplexingly enigmatic. Many of humanities' most entrenched dualities (beautiful and ugly, good and bad, right and wrong, moral and immoral, evil and virtuous, sacred and profane) are normative distinctions. Sometimes normative philosophy is taken to be synonymous with value theory or axiology, suggesting that the key normative questions concern value, its nature and scope. Often, though, normativity is construed as dealing with prescriptive matters—with what should be rather than what objectively is. But what should be, what we ought to feel, or do, or think, is a question of what values serve as the norms or standards to govern our experience and guide our behavior. Clearly it is impossible to briefly sketch a comprehensive projection of how normative philosophy might advance if semiotic realism replaces epistemic nominalism as the metaphysical basis for philosophy, but I will take a narrow look at one possible approach that might bear some fruit.

Normative behavior is undertaken with values or standards taken into account, with an awareness of how one ought to act to achieve desired outcomes, and such behavior cannot be explained fully without reference to those standards or values. Framing our consideration in Peirce's basic ontology, we can divide human behavior into three general categories: feelings, actions, and thoughts. The cardinal normative values Peirce associates with these kinds of behavior are *admirability, moral goodness*, and *truthfulness*, and it is clear that he believes these values can function as standards or ideals that really can enable us to direct the course of our lives in deliberate ways.²⁶ But how?

²⁶ This is a simplified account of Peirce's views and doesn't take account of the great portion of human actions that are not strictly deliberate but are naturally- or culturally-formed habitual responses to experiential occurrences. Insofar as Peirce's three principal values can be supposed to guide such ordinary non-deliberative behavior, it would have to be

It will help to consider a more down-to-earth standard, say a standard of length.²⁷ In earlier times an official standard of length was a specific metal rod precisely scored at each end and maintained in a carefully controlled environment. Replicas could be compared with this standard of length to insure accuracy. But, on deeper consideration, the so-called physical standard, itself, was never really the standard of length. The real standard was the particular characteristic, the ideal length, which was maintained by keeping the standard rod in a strictly controlled environment. The designated standard rod was only a *representative* of a characteristic (the ideal length) that it intrinsically possessed (under controlled conditions). And of course a representative is a sign. I submit that this is the case with normative standards as a general rule.

This suggests a semiotic approach to normativity. We know that signs mediate between their signified objects and their signified to, or semiotically caused, interpretants. Presumably the object of a value sign will be the value, or characteristic, represented in or by the sign, and the interpretant will be an effect of some kind produced by the indirect influence of the signified value object. Value signs, themselves, can be qualitative, actual objects or acts, or intellectual, so, for example, a particular quality of red can be the standard red; or a particular recorded instance of a musical performance might become the standard for what will count as a certain kind of interpretative perfection; and from our religious heritage we might take the ten commandments, said to have been given to Moses, as an archetypal sign of law.

I will not go much further with this, except to note that, over time, semiosis works its way toward final interpretants, or intellectual habits, which amount to programs for future behavior. When values are the correlates of signs, as I'm suggesting they are in normative thought, then perhaps the end of value semiosis is that habit which brings our responses into more or less automatic harmony with their respective semiotic objects, our value standards. In Peirce's value theory, values that rise to the level of ideals are used deliberately as guides for conduct. They imply a resolution to feel, act, or think in a certain way, namely in accordance with the value-ideal itself. Over time, acting in accordance with our value-ideals will engender habits of conduct and will form a stable character. This is a rough and extremely abbreviated example of how a semiotic analysis of value-guided behavior might contribute to the philosophical study of normativity.²⁸

through deeply embedded programming determined under the influence of those values. Peirce's argument for concluding that *admirability, moral goodness*, and *truthfulness* are the three cardinal normative values is clearly of philosophical interest but is not a semiotic question.

²⁷ The following three paragraphs are taken largely from HOUSER, 2011. Note that what I am sketching is how a semiotic analysis might contribute to understanding how values/ standards can influence behavior and shape character, not how values are adopted. Value semiosis is applicable whether values are simply formed through cultural/social assimilation or are adopted deliberately.

²⁸ This is a preliminary consideration of how semiotic analysis might help address, or at least approach, the problem of normativity. Of course I am not the first to suggest that semiotics can contribute to this important philosophical topic. See MORRIS, 1964, for an early treatment of normativity from the standpoint of semiotics.

In a more comprehensive treatment of how philosophy might benefit by accepting semiotic realism and from applying semiotic analysis to philosophical problems, I would sketch examples from a number of additional areas. For example, I might try to show how semiotics could contribute to formal and practical logic by, on the one hand, helping to refocus attention on the theory of notation and, on the other, by generating an improved analysis of inferential types. Or I might sketch how Peirce's semiotic theory of mind avoids the Cartesian limitation to the internal privacy of individuals and is consistent with a theory of mind that extends beyond individual biological organisms into social groups and institutions of various kinds-likely necessary for the survival and advancement of civilization given the inadequacy of human brains for the long-term storage of the necessary intelligence (HOUSER, 2016). And I could go on. But hopefully you now have an idea of how merging robust semiotic theory with philosophy might contribute to a richer analysis and understanding of philosophical inquiries that have been constrained by an overly enthusiastic wielding of Ockham's Razor. I won't risk making any predictions about how long it will be before we move into a new age of understanding, the age of signs, after philosophy has adopted semiotic realism as its foundational metaphysics—of course I don't know truly whether that day will ever come. But I can say with confidence that the more semiotically informed philosophy becomes, the better.

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