

Signs, Social Ontology, and Critical Realism

TOBIN NELLHAUS

Signs and representations are clearly fundamental to social life. Yet despite its invaluable insights into the nature of reality, social existence, meaning and reference, the critical realist philosophy of Roy Bhaskar has not provided an adequate account of signs. Indeed, in two recent books (1993; 1994) Bhaskar devotes merely a diagram and two pages of sketchy text toward analyzing the sign structure, even though without signs, meanings are literally unthinkable. The undertheorization of signs results in theoretical and political difficulties. For example, the exact ontological status of signs and meanings is unclear, which casts a shadow over Bhaskar's larger ontological framework, especially since he holds that society is concept-dependent. Given the dominance of poststructuralist ideas in exactly this area (whether through semiology, discourse theory, deconstruction, psychoanalysis, or linguistic analogies), it is unlikely that critical realism will make much headway among cultural theorists unless it provides a satisfactory account of the sign.

In this article I will take up Bhaskar's few comments on the sign, and develop them farther by appropriating ideas of C.S. Peirce. Obviously a complete analysis of signs is unfeasible within a single article, but it *is* possible to lay fuller foundations for a critical realist semiotics. Those foundations, however, force a revision of Bhaskar's ontological strata. I will then pursue that revision to explore the significance of signs for the ontology of society (an issue that has several analytical and methodological implications), and for a general picture of the dimensions of practice.

1

The currently-dominant understanding of the sign was developed in modern times by the Swiss linguist Ferdinand de Saussure, who shortly after the turn of the century defined the sign as having two parts: a meaningful component called a "signified," and the mental image of its spoken or written form, the "signifier."

(Versions of this analysis go back at least to the late seventeenth century.) The relationship between the two is “arbitrary,” or better, a social convention. Signs are distinguished only by their differences, which form a linguistic system (*langue*), which Saussure distinguished sharply from individual utterances (*parole*). The linguistic system can only be understood by examining it during a single historical moment (synchronically) rather than across time (diachronically). Saussure named the study of sign systems “semiology,” and argued that all sorts of social practices could be analyzed semiologically (Saussure 1986). That understanding laid the basis for structuralism and a hefty part of poststructuralism; it provided much of the impetus behind the “linguistic turn” and linguistic analogies.

However, the Saussurean sign (the signifier/signified pair) involves nothing akin to a referent or object, and if it doesn’t exclude the extra-mental world altogether, certainly gives it no role within the signification process. For this reason alone (and there are others), it cannot be incorporated into critical realism. Consequently, Bhaskar breaks with this conception of signs, and argues that “the centrepiece of any adequate theory of meaning must be the semiotic triangle.” He illustrates his idea with a diagram, the essence of which I present in Figure 1 (Bhaskar 1993: 222–23).

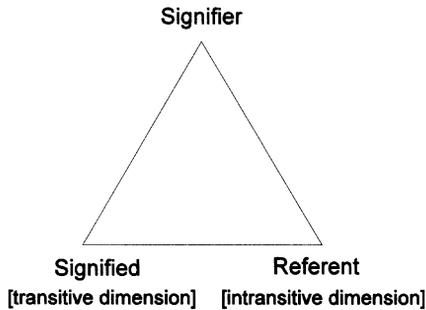


Figure 1. Bhaskar’s Semiotic Triangle.

The transitive or epistemological dimension concerns present thought, discovery, analysis, and perception; the intransitive or ontological dimension refers to the object’s existence, independent of its present identification, as an object (or possible object) of knowledge or reference. Bhaskar makes several remarks about his concept of the sign, the most important for present purposes being, first, that nominalism customarily elides the signified, whereas poststructuralism (like Saussure) elides the referent; and second, that all three components of the semiotic triangle may have many other semiotic triangles attached to them. (He presents the same diagram along with briefer commentary in Bhaskar 1994: 52–53.)

Bhaskar’s semiotic triangle bears a striking resemblance to the concept of the sign developed during the late nineteenth and early twentieth centuries by a

an operation or *process* aiming toward some effect or goal. A sign in Peirce's definition is always active, never static; it consists of an interaction between the sign-interpreter and another agent (be it a human or some entity in the world) (CP 5.484). Semiosis is an *act*, a practical action in the real world. The sign in this definition is also fundamentally mediative, as it enters between and so connects two things (the object and its interpretant); one might say, it communicates between them.

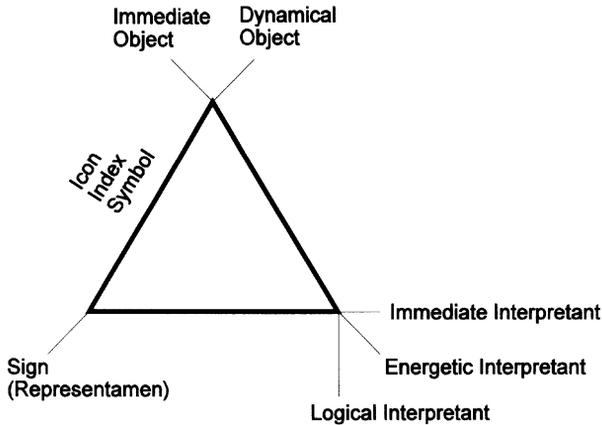


Figure 3. *The Peircean Sign (elaborated version).*

The sign is mediative in another sense as well. For Peirce, there are actually *two* objects: the “dynamical object” and the “immediate object” (see Figure 3). The dynamical object is the real object of reference in the world (which includes past experiences, but also fictions and concepts), which in some way influences or corresponds to the sign; in contrast, the immediate object is the object as the sign presents it, that is, as a perception or mental image. From the latter perspective, the object of a sign can only be another sign, and we can only experience the signs, not the object itself. Knowledge consists solely of signs. Here Peirce anticipates more recent conventionalist arguments concerning the semiological, theory-laden character of all perception; this point, however, is equally captured by Bhaskar’s forceful arguments that science is an epistemologically relative social practice occurring in the transitive dimension (1978: 188–89, 249). In fact Peirce’s distinction between the immediate and dynamical objects is tantamount to Bhaskar’s contrast between the transitive and intransitive dimensions of knowledge (cf. Peirce’s distinction between the “Inner” and “Outer World”), and Peirce explicitly defines the real as “that whose characters are independent of what anybody may think them to be” – an independence he accords even to dreams, once they have been dreamt. The dynamical object is relatively independent of the present thought (and thus intransitive) and remains

an influence upon semiosis, and therefore the immediate object tends to give at least a hint or indication of the dynamical object. Thus knowledge of the dynamical object is possible, even if mediated and perhaps approximate. Signs, then, mediate our interpretive relation to the world (*CP* 4.536, 4.539, 5.311, 5.473–74, and quoting 5.405).

The sign (representamen) itself can have three main forms.⁴ These are the icon, the index, and the symbol. The distinction derives from the different relationships the representamen can have with the object. A relationship of similarity, analogy, or another comparably shared quality produces an icon (a category that includes not only pictures, but also diagrams, metaphors, conceptual models, mathematical formulas, etc.). An index is related to a specific object through a real relation, either by being its effect (the smoke produced by a fire, the rise of mercury in a thermometer), or by referring or pointing to it (an arrow toward something, a pronoun). A symbol, finally, bears a conventional relationship to the object, and applies to the object as a general category (the word “dog” has only a conventional or habitualized connection to actual dogs, and applies to all dogs). Note that *all* of Saussure’s signs are symbols in Peirce’s sense; this is necessary for Saussure, since he eliminates the referent from consideration. It is extremely common for sign-types (relationships between signs and objects) to be combined and “impure.” For example, the “happy face” ☺ is a conventionalized icon (an iconic symbol); “experience,” in one of its meanings, combines indexicality with conventionality. But the basic distinction is useful enough (*CP* 2.247–49, 2.276–306).

Interestingly, Peirce argued that icons are essential to thought and must appear directly or indirectly in any assertion (*CP* 2.278, 4.531). Bhaskar similarly recognizes that analogies, metaphors and other sorts of imagery play a crucial creative role in scientific model-building (e.g., 1978: 152–59, 239; 1993: 223). Of course, an icon’s immediate object is a mental representation, and the dynamical object too may be imaginary.⁵

The interpretant is by far the most complex notion. There are three major issues I want to bring out. First, any interpretant can become the object for a subsequent semiosis – and subsequent semiosis is the norm, at least among humans. Put phenomenologically, this means that we live in a world that is, for us, one of unceasing semiosis; we are constantly developing our dim perceptions into fully-blown concepts, rethinking our past, and so forth *ad infinitum*. Furthermore, if one tries to trace a semiosis backward, one simply comes upon somewhat less-developed signs, never to an object free of an interpretant. So infinite semiosis, at least in principle, occurs in both directions (*CP* 1.339, 2.274). Here again Bhaskar appears to have arrived at a similar conception when he speaks of the semiotic triangle possibly being attached to many other semiotic triangles.

Second, an interpretant need not be a concept. For this reason the Peircean interpretant is not identical to the Saussurean signified. Peirce preferred to describe the interpretant as a “significate effect,” of which there are several kinds. Peirce’s analysis changed somewhat over the years, but the best account

posits three types of possible interpretant – “possible,” because after the initial one, it is contingent whether further interpretants arise. That initial interpretant is the “emotional” interpretant. The term is a bit misleading since Peirce has in mind not (or not necessarily) the grand emotions such as joy, fear, sorrow, or rage, but more fundamentally, low-level feelings such as recognition, acceptance, interest, or uncertainty. Next, the “energetic” interpretant is a sort of action, possibly of the body (a response to a command or to a traffic light), but more likely a mental effort, a basic idea (unfortunately Peirce is not terribly clear about this). Finally, there is the “logical” interpretant. Here Peirce says something very interesting. The logical interpretant may be a concept; but a concept may always be followed by another logical interpretant. The *ultimate* logical interpretant, he argues, is a strengthening, weakening, or alteration in a *habit*: a habit-change. Such habit-changes need not arise gradually: Peirce notes that even a single effort of thought can produce it (*CP* 2.292, 4.536, 5.473–93).

The idea of semiosis leading to habits and habit-changes offers an important contribution to a critical realist understanding of selfhood and social identity; the feminist theorist Teresa de Lauretis has employed it to that end, making cogent arguments about the constitution of subjectivity and the nature and significance of experience. As she argues, “[Peirce’s] theory of meaning does not incur the risk of idealism because the system of systems of signs which makes human communication possible is translatable into habits, concrete action upon the world; and this action then rejoins the universe of signification by converting itself into new signs and new semiotic systems.” She rightly notes that the extramental world can appear in Peirce’s theory of semiosis at *two* points: at the beginning, in the dynamical object; and at a possible end, a habit-change, which materializes in human embodiment (quoting de Lauretis 1984: 175; see also de Lauretis 1987: 39–42, and 1984: 178). I will add that the connection to social structures is clear: habits (among them the conventions constituting symbols such as words) are normative practices, which are and must be socially conditioned. Thus habits are “both the result and the condition of the social production of meaning” (de Lauretis 1984: 179, italics removed). By the same token, social structures are incorporated and embodied as habits – or in Bourdieu’s terms, *habitus* (Bourdieu 1984: 468).⁶

With this discussion in mind, I would like to return momentarily to Peirce’s distinction between the immediate and the dynamical object. In a Saussurean analysis, and in Bhaskar’s semiotic triangle, the immediate object would be subsumed within the signified. Peirce offers a subtler approach. Clearly the dynamical object (the real referent) is intransitive, whereas the immediate object (the referent’s representation) is transitive. But the immediate object is not identical to its effects, and it is the latter which constitute interpretants. Thus we can distinguish between the real (dynamical and intransitive) object, the immediate object as its representation, and the various possible (and transitive) semiotic effects of that representation.

The third point I want to raise concerning the interpretant is that unlike the signifier, this concept is not anthropocentric. All that Peirce's theory requires for semiosis to occur is the presence of a mind or even what he called a "quasi-mind," which forms an interpretant—a "significant effect"—from the sign. "Thought is not necessarily connected with a brain," he wrote, noting that his semiotic analysis attempts to encompass non-human thought (*CP* 4.551; see also 4.536, 4.550). The dance of the honeybee may signify nothing to us, but be highly meaningful to another honeybee; antibodies "recognize" chemical markers on cells. Semiosis does not require human consciousness.

When I began describing the Peircean sign, I emphasized its mediative character. For humans, that makes the sign inherently dialogic and social. Peirce does not explore this issue thoroughly, but it appears at various points. Since the symbol (like the Saussurean sign) is conventional, it is certainly social, but not all signs are composed entirely of such social "material" – indexes, for instance, may refer to natural causes and effects. However, the fact that any sign involves interactions between mind and world and is a sign *for* somebody gives it an implicitly social character: signs, he says, require at least two "quasi-minds," one as utterer, the other as interpreter. Through the object, every sign maintains connections to history and society. It also has a social effect: Peirce's view of semiosis as action brings him very close to the speech act theorists who emphasize the pragmatics of discourse, and Peirce frequently argued that thought itself is a dialogic; likewise, V.N. Voloshinov, whose effort to develop a marxist theory of language remains vital to any understanding of the social nature of discourse, called thought "inner speech" (*CP* 4.6, 4.551, 5.354, 5.546; Voloshinov 1973: 29, 37–39).⁷ Consequently, as Peirce wrote, "a person is not absolutely an individual" (*CP* 5.421) nor is truth located in the individual: "Logic is rooted in the social principle" (*CP* 2.654). Semiosis, then, is social in its process, its products, and its goals, but not always in its materials. The last, however, is crucial: some signs are *not* wholly social but instead are determined to some degree by extra-discursive, even extra-human realities. Among such signs are experiences. By the same token, sign-systems and society cannot be conflated.

Peircean semiotics covers as vast a range as Saussurean semiology, but unlike Saussure, Peirce does not make language a privileged model through which all sign-production must be understood; instead, Peirce is concerned with the variety of possible signs from the very start. And a Peircean sign is not coterminous with a single word, a simple signal like a traffic light, and so forth: a sign may be of any size and complexity. Propositions, arguments, triptychs, jazz riffs, plays, rituals, thoughts are all signs. All experiences are signs, and the interaction between self and world that produces experiences produces signs. More: not only is the self a sign-user, according to Peirce the self *is* a sign, both constituted and manifested in and through signs. Here too Peirce contrasts with Saussure: where Saussure defined semiology as a branch of general psychology, Peirce argues the opposite – since the self is a sign, psychology is a form of semiosis

(*CP* 5.313–15, 6.270; Saussure 1986: 15–16). Voloshinov similarly emphasized that “The reality of the inner psyche is the same as the reality of the sign” (1973: 11–13, 25–39, quoting 16, italics removed).

As a sign, the self’s exact significance, character, and value adjusts with its context and changes with history. Partly for this reason, we should describe the self not simply as a sign, but also as a sign process. By doing so one can account both for its unitary appearance and for its complex, structured character. The latter includes the processual, dialogic and thus social nature of the self, involving the present self’s interactions with its past, its future(s), its (real or imagined) audiences, and with the world in the formation of experience (cf. Colapietro 1989; Wiley 1994). In addition, semiotic processes occur at pre-, sub- and unconscious levels. Many of these are governed by habits, which help channel semioses into regularized patterns. Thus these manifold and potentially conflicting semioses generate a self which may not be “coherent” but is nonetheless unified by habitualized regularities and a self-image: in Bhaskar’s phrase, a dispositional identity (1993: 165). But in this regard the self is like any other Peircean symbol: it possesses a unitary quality, even if closer examination reveals that it remains open to the world and consists of disparate meaningful strands which show their face only selectively and betray socially-produced regularities such as habits. In other words, the self (and the symbol) is a “partial” totality (see Bhaskar 1993: 126–27).

A Peircean and critical realist analysis of the self, then, has similarities to the poststructuralist argument that the Subject, as a unified self and the origin of action, is fictive. However, unlike the poststructuralist analysis, the Peircean and critical realist account holds that the self is a sign process, but that this gives no warrant for considering it a mere fiction. The sign-self bears its own specific causal efficacy, and hence is real: considered from the Peircean perspective, since the self is a sign, it can generate new signs (including habits and habit-changes); from the critical realist position, whether or not a person’s reasons for acting can be ascribed to a unitary self, reasons are causes (Bhaskar 1989: 90–97; 1994: 103–4).

Much more can be said to flesh out the critical realist theory of signs, and much that Peirce, Voloshinov and others can contribute to it. However, my focus in the present article is on the implications of semiotics for social ontology. What I have presented so far is sufficient for that purpose, and so I will proceed to the next step of my argument.

2

For Bhaskar, reality is stratified into three ontological domains. The fundamental domain is the *real*. All real entities possess various causal powers and susceptibilities (in the form of structures and/or “generative mechanisms”) which affect and

are affected by other entities; and if something has causal power, it is real. Structures and mechanisms range from physical ones like atomic and chemical structures, to biological ones like physiological and ecological systems, to social structures such as modes of production, sex/gender relations, and ideas. Powers may strengthen, wane, alter, remain latent, or be deflected due to the influence or absence of other entities or with the passage of time. In other words, powers create potentialities or tendencies which may or may not be manifested, depending on the circumstances. As a result of these causal forces, entities interact in various ways and so produce events, which occupy Bhaskar's second domain, the *actual*. Finally, some events are or result in experiences or concepts, which belong to the third domain, the *subjective*. Consciousness and its contents are thus the tip of the ontological iceberg, the contingent products of a myriad underlying dynamics and conditions (Bhaskar 1978: 56–59; 1993: 11, 393; 1994, 23, 42, 204).³

The concept of ontological stratification is fundamental to critical realism, and stands as one of its most important contributions to philosophy. Nevertheless Bhaskar's account is not altogether satisfactory. I have no objections to his concepts of the real or the actual (although I will introduce some refinements shortly); but to define the third domain as "subjective" raises several problems. First, the "subjective" in its strictest sense refers to the idea of a coherent and deeply interiorized and individualized self which possesses a will and is the origin of action and knowledge. That concept, however, is socially conditioned and historically circumscribed. Much as it may be valued today, the particular set of concepts and assumptions that form "subjectivity" simply did not occur before roughly 1600, and until recently applied only within Euro-American cultures – there are other concepts of self and agency (see Reiss 1982: 27–34, 55–107; Vernant and Vidal-Naquet 1990: 29–84). To treat subjectivity, a culturally limited phenomenon, as a (necessarily universal) ontological level would seem to involve a form of essentialism or hypostatization, not to mention ethnocentrism. Yet while the ancient Greeks and perhaps the present-day Maori may not have "subjectivity" in its modern, Western sense, they certainly have experiences and concepts, and possess selves and agency. Second, if we were to adopt a looser concept of subjectivity as simply "selfhood" or "consciousness," privileging the subjective invokes a methodological and epistemological individualism that conflicts with the tenor of Bhaskar's work; as Peirce, Voloshinov and many others vigorously argue, the self is inherently social. Third, even an extraordinarily broad notion of the subjective encompassing the (I think untenable) idea of "cultural subjectivity" is anthropocentric. It seems highly unlikely that reality would develop an entire ontological domain to which humans alone have access. *Part* of a domain, yes: anthropocentrism is admissible in the sense that human experience is vitally important to humans – even though humans have the capacity to "see out of others' eyes" to some extent, we must (and should!) be involved in our own experience. However, critical realism claims to offer a

philosophical basis for *any* knowledge-seeking practice. That should include studies of other species. Since many animals experience events, learn, use signs, and even respond creatively to situations (whether or not they have selves), critical realism needs to provide itself with concepts that allow us to understand them.

My argument, let me emphasize, is *not* that there is no third domain, but instead that it is not “the subjective.” Yet Bhaskar is correct to say that this domain encompasses experiences and concepts. The question then becomes, what *are* experiences and concepts? As the preceding section argued, they are *signs*. Voloshinov puts it this way: “*experience exists even for the person undergoing it only in the material of signs*” (1973: 28, his italics). “To experience” something means to have an embodied mental interaction with it which produces signs, some of which we react to or remember; once the interaction has passed, what remains of the experience is only a memory, a group of signs in the mind. We can rearrange and abstract from experiences, sometimes producing concepts, sometimes falsehoods, sometimes fictions; and all of these too are signs – they are meaningful and have significant effects, regardless of their degree of validity or referentiality. Thus *the third ontological domain consists of meanings embodied in signs and semioses*. I prefer to call it the *semiotic* domain, to emphasize the sign-processes: this is a realm of continual activity and productive practice, in contrast to the stasis of the Saussurean *langue*.⁹

There is a further weakness in Bhaskar’s account of the three domains which defining them as the real, the actual, and the semiotic helps to resolve. To my knowledge, nowhere does Bhaskar identify precisely what criteria determine how one domain differs from another, and whether such criteria are the same for distinguishing the actual from the real as for distinguishing the subjective (or whatever) from the actual. At some points he argues that the subjective is a subset of the actual, and the actual a subset of the real; at other points he indicates that in some sense, the subjective is “above” the actual, and the actual over the real. While I agree with both of these descriptions (in ways I will explain momentarily), they are plainly too vague to be very informative. For instance, a major sense of the term “experience” is an *event*, one where an embodied mind interacts with the world. That sense gives us little reason to claim that experiences belong in a special ontological domain, when we could say they are simply some events among others within the actual, albeit events occurring “in someone’s head” and not in the Andromeda galaxy.

What distinguishes the domains, I believe, is *emergence*. This is another crucial concept in critical realism, and Bhaskar’s definition is broad but clear: emergence is a “relationship between two terms such that one term diachronically or perhaps synchronically arises out of the other, but is capable of reacting back on the first and is in any event causally and taxonomically irreducible to it” (Bhaskar 1993: 397; also 1994; 73, 253). Hitherto, the concept of emergence has only been applied to relationships among entities or between types of entity.

For example, the species *homo sapiens* emerged within the biological realm, and capitalism emerged within the social realm. More, life is emergent from chemical and physical reality, and human society is emergent from the biological. The beings that occupy these emergent strata clearly possess distinctive and relatively autonomous causal powers or properties: intentional agency in the social realm, for example, enables people to act upon biological, chemical, and physical entities, as well as upon each other. While such powers emerge from and are conditioned by the “lower” strata, they cannot be reduced to them. This analysis is what Bhaskar calls “emergent powers materialism” (1993: 49–56, 172, 400; 1994: 73–74, 101; 1989: 97–99).

However, there is good reason to suggest that not only are beings and types of beings emergent, but ontological domains are as well. Actually, Bhaskar seems to hint at this possibility when he writes of “the dialectic of the real and the actual which occurs in emergence” (1994: 237), but he does not pursue the notion. To understand how the concept of emergence applies to ontological domains, let us consider Bhaskar’s statement that “the necessary and the possible [are] constitutive of the domain of the real” (1993: 393). The necessary is in fact a kind of possibility (a “100% possibility”), and so we may for shorthand define the real as the domain of possibilities or conditions of possibility. Out of these possibilities arise various events and entities; but these occupy a new domain, the actual. The actual is emergent from the possible: actualities not only are governed by underlying structures and generative mechanisms, but also may act upon them, perhaps conditioning the exercise of their powers (a table may prevent a glass from falling), altering them (a revolution may overturn an economic system), or even creating new ones (the evolution of hominids led to the formation of human social structures). Unlike the possibilities and latent powers of the real, the actual is an achieved result, in the etymological sense a “fact.” Actuality is a new property, which cannot be reduced to mere possibility. *Likewise for semiosis*: among the many actual events and entities, some involve interactions with a mind or quasi-mind which forms an interpretant of the object it encounters. Signs emerge, possessing a new property or power – meaning. Perception, being a semiotic process, is now distinct from other events (and is necessarily theory-laden). Since reasons are causes, and reasons are signs, then signs can in effect (here, through human agency) act upon actualities and even possibilities as people act upon one another and upon their conditions of existence. At the same time, semiosis is conditioned by actuality, in the sense that we can only produce signs through the semiotic capabilities that we have actually developed (biologically, historically, socially, and individually); for that matter, semiosis can occur only among those beings which have a mind or quasi-mind.

The concept of emergence also clarifies the apparent ambivalence between considering the domains as subsets or viewing them as higher developments. Both views are correct, depending on the perspective one takes. Emergent

entities and levels can be depicted as “superstructural,” as (to take Bhaskar’s examples) the social relations of production are upon the forces of production, so that the social relations place boundary conditions on the development of the productive forces; *and* as internal “infrastructures,” around which the surrounding structure or context provides the framework or conditions of possibility, such as the development of kinds of government and types of culture within a particular economic system (Bhaskar 1993: 53; 1994: 75). This understanding of emergence underscores the fact that signs and actualities are both *real* (causally efficacious), but *not all* of the real, and that signs (experiences and concepts) only represent *some* actualities. At the same time, only through signs do minds have access to the real at all. Furthermore, applying the concept of emergence to ontological domains permits us to recognize subdomains, specific regions within a major domain. By such means, we can distinguish human from other types of semiosis, and within the realm of human signs make epistemological discriminations between experiences, concepts, fictions, etc., and examine the historical emergence of cultural formations like subjectivity.

The use of emergence to distinguish ontological domains assumes a Peircean concept of semiosis, which constitutes an ontological domain that replaces Bhaskar’s subjective domain. This revision of Bhaskar’s ontological strata bears one other connection to Peirce’s ideas (a connection which, I will confess, caused me some surprise). For most commentators, and at times for Peirce himself, the most awkward and even embarrassing aspect of Peirce’s philosophy is undoubtedly his “phenomenology” (which, among other things, wobbles between phenomenology and ontology). Peirce proposed three fundamental categories called Firstness, Secondness, and Thirdness, and he applied and compounded them zealously. It looks for all the world like the monomania of a Platonizing crank. Nevertheless it bears a second glance, and to the degree that his trichotomy has realist content, so too does Peirce’s philosophy. The task, then, is to disentangle the ontological thread from the phenomenological thread in Peirce’s discussions. Firstness generally concerns isolated qualities, but at several points Peirce defined Firstness as “possibility,” and described quality as a capacity that exists whether or not anyone perceives it. If we emphasize those aspects, then Peirce’s Firstness becomes tantamount to the realm of possibilities or conditions of possibility which Bhaskar designates as the real. Secondness pertains to interaction, struggle, occurrence, existence, fact, and so we can interpret it as the domain of the actual. Thirdness, finally, consists of mediation, relationships, natural laws, general rules, and especially signs. If I am correct in my alteration of Bhaskar’s third domain, then Thirdness as semiosis also fits critical realist ontology.¹⁰ To develop a more cogent critical realist analysis of signs, I found it necessary to Peircify Bhaskar; now it is possible to Bhaskarize Peirce!

3

So far I have shown how a Peircean understanding of signs helps to improve upon Bhaskar's concept of ontological domains. However, these domains apply "across the board": they tell us little about the specific ontology of social entities. Bhaskar offers a few suggestions: social structures (at the level of the real) are dependent on agents' activities, dependent on agents' concepts, and only relatively enduring; and neither structures nor agents can be reduced to the other. Out of this he develops the "transformational model of social activity" (TMSA), according to which agents act on the basis of given structural conditions, and their actions (or inactions) ultimately reproduce or transform those structures (1989: 33–38; 1993: 154–60). These are absolutely essential concepts; nevertheless, they do not provide a fully workable ontology of society. Perhaps the biggest oddity in his analysis is that while Bhaskar argues that society is concept-dependent, he doesn't assign concepts a place in his TMSA at all.¹¹ This is worrisome, since signs need not be purely social, and social structures are not just systems of meaning. What we need is to understand exactly how general ontology relates to social ontology. Can we directly apply the former to the latter?

Peirce himself, having few interests in social analysis, has little to say on this question; but support for that possibility comes from an aspect of Margaret Archer's effort to develop a critical realist social theory. That aspect, however, is not explicitly theorized. Where Archer does address ontology, she (like Bhaskar) focuses on the need to distinguish between structures and agents, a distinction that allows us to investigate their different powers and the ways in which they interact; she calls this position "analytical dualism." Like the TMSA, her theory of "morphogenesis" emphasizes that structures pre-date agents' actions, and that social reproduction or transformation post-dates those actions (see, e.g., Archer 1995: 12–16).

However, when she actually applies her theory to social developments, Archer clearly presumes a more complex ontology, since she finds that her theory explicates morphogenesis in *three* realms: structure, agency, and culture. She refuses to treat culture as being simply "inside people's heads" for a very solid reason: much of it isn't. Instead, large portions reside "in the library," or to take a less textualist attitude, in the world's cultural archives and repertoires. Thus knowledge can exist embodied in a document or artifact, without anyone who currently knows that knowledge. In each of the three areas (structures, agents, culture) Archer finds a similar cycle of conditioning, social interaction, and eventual elaboration that sets the stage for a new round of morphogenesis. And each area possesses its own unique set of emergent properties, leading her to speak of structural emergent properties, people's emergent properties, and cultural emergent properties (Archer 1995: 172–94).

Archer's implicit social ontology corresponds strikingly to the three ontological domains as I find them, that is, as reconceptualized via Peirce: the real

(possibilities given by underlying structures), the actual (events and entities), and the semiosis (meanings and sign-processes). Now, admittedly, on first sight this equation of agents and other entities with events (on the level of the actual) may appear unwarranted, since structures are also entities. However, human beings, whose flesh is held together by the continued operation of chemical bonds, whose sustenance is secured by agricultural labor, and so forth, are constituted through the interactions of other, more fundamental entities. As bodies, as minds, as anything, people are ongoing events, products in process. Moreover, one of the unusual features of social structures is that they exist only in virtue of agents' activities. People produce the social conditions of their own existence. That in itself is emergent from human biological capacities: if, for example, we had no ability to communicate, society wouldn't exist at all. But the ontological significance is that people (generically) create a new structure, society, which is a structure of relationships conditioning the possible actions people may take. In that sense, social structures as possibilities depend on people as actualities.

We may interpret Archer's analysis as a three-tiered social ontology of structures, agents, and culture, which corresponds to general ontology. That arrangement accords concepts and other signs a clear place in the theory of social dynamics (TMSA or morphogenesis). Interestingly, if one maps Archer's analyses of morphogenetic cycles onto these ontological strata, one sees a pattern in which emergence involves "movement" from one domain to another, or their "intersection." For example, Archer depicts the morphogenesis of structure through the diagram shown in Figure 4 (see Archer 1995: 193–94); viewed ontologically, the emergence of new structural configurations appears in Figure 5. (In the following diagrams, I rename the "cultural" domain as "discourses," for reasons to be explained shortly.)

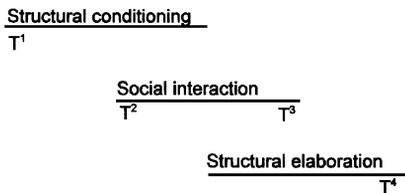


Figure 4. Morphogenesis of structure.

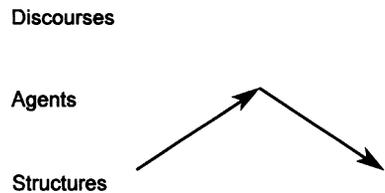


Figure 5. Emergence of structural changes.

The morphogenesis of culture in Archer's model (Figure 6) and the emergence of cultural change (Figure 7) would be graphed similarly.

Ontologically, the emergence of structural and cultural transformations must pass through agents because, of course, only agents can change either (cf. Archer 1995: 304–5). Archer's diagram for the morphogenesis of agency (Figure 8) is similar to her others, but the ontological movement is somewhat different, since agents act on the basis of both their structural and their cultural conditions and

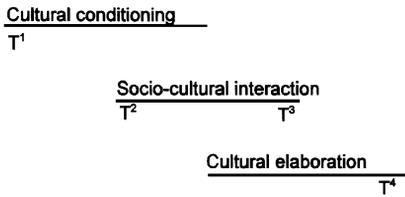


Figure 6. Morphogenesis of culture.

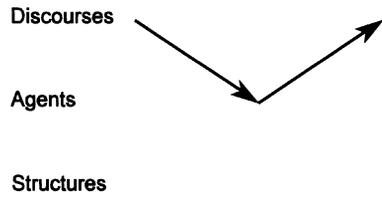


Figure 7. Emergence of cultural changes.

resources, and changes in group configurations may have discursive and/or structural ramifications (Figure 9).

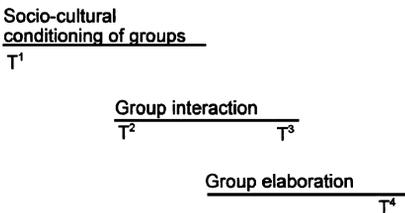


Figure 8. Morphogenesis of agency.

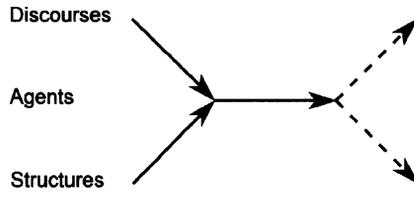


Figure 9. Emergence of agential changes.

However, things are not quite this simple. While such analyses may serve for understanding the broad outlines of emergence in society, they will not suffice when one examines the ontology of specific *practices* such as material production or discursive activity. Economic production cannot occur without semiotic activity such as communication, or for that matter the process of imagining a product and ways to produce it. The product reenters the structural domain in the sense of contributing to the material conditions (e.g., economic capital) for the next cycle of production; but it also becomes part of the cultural sphere, even when it is not explicitly semiotic in content, by being a status marker (cultural capital), since choices of food, clothing, and entertainment are as much indexes of social position as wealth is (Bourdieu 1984). One can make similar arguments for other “nondiscursive” practices, such as games, firefighting, athletics or medical procedures. Discourse, for its part, cannot occur without the use of some sort of physical material (speech sounds, marks on paper, etc.), which are resources found in the given structural conditions. In addition, the effectiveness of a discourse, its authority for its audience, is conditioned by the speaker’s social position, which again depends in part on underlying social structures. The result of discursive practice is not only a cultural elaboration or articulation, but also frequently a realignment of agents and perhaps an adjustment or contribution to structural conditions. For these reasons Voloshinov describes the sign as simultaneously material, sociological, and meaningful (1973:

33). The reorganization of agents and agency, as I showed above, already involves both structure and culture.

In short, the division between discursive and nondiscursive practices is not at all clearcut; and while I do not recommend dismissing the distinction altogether (*contra* Laclau and Mouffe 1985: 107–10), each decidedly involves some element of the other. This “mixed” character is fundamental to all things social. For example, Archer argues that what distinguishes a structural emergent property is “its primary dependence upon material resources, both physical and human” (1995: 175, italics removed). This is an excellent definition, yet Archer also defends the thesis that social structures are concept-dependent (with the crucial proviso that this assertion refers principally to the concepts of the long dead) (Archer 1995: 145–47). There is no escaping the conclusion that social structures involve *both* material resources *and* embedded concepts, even if the former weigh more heavily than the latter in the analytical balance.

Cultural activity, conversely, primarily depends on systems of meanings, but also requires material resources, especially human ones. This, however, raises a second reservation: in the preceding discussions I’ve allowed Archer’s definition of the cultural sphere to go unstated, but it is actually problematic, in ways that bear upon social ontology. For Archer, cultural emergent properties are logical relations of consistency or inconsistency among propositions, and she relegates myths, symbolism and the like to the agents’ socio-cultural interactions and interpersonal influence (Archer 1995: 179–81; 1996: 103–42). For whatever it’s worth, this conception of culture is of a piece with Bhaskar’s “subjective” domain, which he populates only with experiences and concepts. It is a distinctly cognitivist (or in a sense, rationalist) view of culture, and frankly, it is deeply impoverished. Archer solely neglects the role of imagery, embodiment, and related matters within knowledge itself. For example, the conceptualization of light as waves (or as particles) is less an act of logical reasoning than an act of imagination. Once that image is in place, it is possible to consider its logical entailments and its degree of consistency with the information at hand, but ultimately it is the image that organizes the information, however much the information may suggest an image. To suggest that the image belongs strictly to interpersonal influences evacuates its role within theory. (Let me emphasize: I do not object to Archer’s claims for the universality of certain basic elements of logic – only to her expulsion of imagery from the cultural system.) As I pointed out earlier, Peirce maintained that icons are essential to thought. Bhaskar, for his part, at least recognizes the importance of imagery in knowledge; but until images and iconic models have a defined space within the ontology of social practice, they remain at best the whisperings of the gods. For this reason it is vital to recognize that imagery emerges out of embodied interactions with the world. Cultural activity’s dependence on material resources thus involves human bodies not just instrumentally, but for the imagery that organizes meaning (Johnson 1987).

One final point I want to raise regarding the models of structural, social, and cultural transformation presented above is the role of motivation at each of these levels. As Bhaskar rightly emphasizes, the emergent property distinguishing human agency from its biological substratum is intentionality (Bhaskar 1989: 335; 1993: 51). However, while intentionality in society can only be attributed to people and not to social structures or signs, it certainly marks and orients people's products, including structures and signs, so that these too exert some form of goal orientation or motivating pressure, such as a sociological function, a set of interests, or a discursive (illocutionary) force. This is the specific mark of a thing's social character.

Thus, we find each of the three levels of society characterized by material, meaningful, and sociological aspects (see Table 1, to be explained shortly.) Consequently, the three levels may "correspond" to the ontological domains, but they are not equivalent to them: strictly speaking, the ontological domains (fundamental structures, actual interactions, and semioses) are part of *every* social level. The three levels of society thus "elaborate" (or are socially emergent forms of) the ontological domains. Furthermore, since signs are part of every level of society, it is misleading to designate only one of them as "cultural." Cultural issues contribute to every level. One *can* say, however, that there is one social level at which cultural materials are coordinated, systematized, placed into articulated discursive networks; a level which, with Peirce, is one of connections, generalities, regularities, rules, and order. I will call this the "discursive" level, in place of Archer's "cultural system." But discourses are conditioned by and hence incorporate icons and indexes, especially those that form at the structural and agential levels; thus a discourse need not be verbal, but must include icons and indexes within some set of symbolic (or symbolizable) relations. Discourses' incorporation of icons and/or indexes is especially important not only for the production of knowledge, but also for the cultural possibility (much exercised in the twentieth century) of articulating discourses concerned with absurdity, irrationality, uncertainty, absence, or negativity (including, in its own way, critical realism itself), insofar as these concerns derive from images and indicators produced by ordinary living.

The three ontological domains appear in some form within each level of society precisely because in society, the domains only exist through human agency. Their forms of appearance – the material, sociological, and meaningful aspects of practice – constitute the "phenomenological" dimensions of social activity (a phenomenology which carries some kinship with Peirce's; this crossing of ontology and phenomenology within social practice may explain the "wobbling" in Peirce's philosophy). Since the phenomenological dimensions are related to the ontological domains, they too have emergent properties and hence a degree of autonomy. The phenomenological dimensions of practice also correlate with the three main modes of explaining social behavior, delineating in what manner, to what end, and with what understanding people act. *Technical* explanations focus on material realities to show how social structures, practices,

and forces operate, how they achieve their effects. Such explanations divulge structures' and mechanisms' dispositions to act in certain ways and generate certain results. However, it is possible for agents to monitor and act back upon those mechanisms, producing them or facilitating their operation, in order to achieve their effects. The mechanism's disposition to cause some effect provides a "reflexive motivation" for producing the mechanism. Thus, emerging from technical explanations are what we might call *reflexive-motivational* explanations or, in a broad (non-organicist) sense, *functional* explanations, which identify the goal-orientations, roles, or consequences that direct agents' actions or become embedded in social structures and discourses – the ways in which they feed back into agents' own states or conditions. In other words, functional explanations in this expanded sense concern the reflexive motivation of agents' action upon causal mechanisms. Such explanations do not assume that all actions or operations are beneficial to the social system as a whole, nor even necessarily to a dominant group: one can attribute reflexive motivations in society, only to agents (whether individual or "corporate"), never to the entire society and since social practice concerns transformational interactions and often struggles between agents, a social entity's reflexive motivations or functions may conflict with fundamental social structures, with the reflexive motivations of other entities, or even with each other. Moreover, since society is a system of positioned practices (see Bhaskar 1989: 40–41), agents are necessarily differentiated and therefore obtain differing reflexive motivations in the form of interests and differing capacities to realize such interests, as well as intentions to act on the basis of their given conditions, positions, and resources. However, these various reflexive motivations (interests and intentions) can themselves become the object of reflexive motivation: by "monitoring the monitoring" of their actions (see Bhaskar 1989: 35), agents generate an understanding and rationale for their actions (which we might call "motivated reflection"): the meanings of action influence the intention to act. Thus, *hermeneutic* explanations emerge from reflexive-motivational (functional) explanations to disclose how people and institutions act according to socially-created structures of meanings. Practices not only have methods and goals, but also significance: along with the pragmatic and interactive aspects of their activities, people act for symbolic ends or in symbolic ways, and produce meanings in the course of their activity. The structures of meaning themselves depend on positioned practices to motivate social distinction.¹²

Taken together, the social levels and their phenomenological dimensions can be represented as a grid, as shown by Table 1. The vertical axis shows the three levels of social ontology, and in parentheses indicates the general ontological domain to which they are most connected. The horizontal axis presents the phenomenological dimensions of practice, and places the modes of explanation in parentheses. I have attempted to indicate what sorts of social elements occupy each grid cell (more could easily be added). Due to the mixed character of all social practices, it is sometimes difficult to decide where to place certain features

Table 1. *The Ontological and Phenomenological Dimensions of Social Activity*

| Phenomenological Dimensions of Practice <i>(Explanatory modes)</i> | | | | |
|--|---|---|---|---|
| | | Material <i>(Technical)</i> | Sociological <i>(Reflexive-motivational/Functional)</i> | Meaningful <i>(Hermeneutic)</i> |
| Ontological Levels of Society <i>(General ontological domains)</i> | Discourses <i>(Semiosis)</i> | Texts, utterances, locutionary acts (material signs/representamens) | Illocutionary forces, intended meanings Psychological processes (inner speech) Power as ability to choose, interpret, and express | Discursive articulations or formations; reasons/reasoning Theories, ideologies; novels, plays, music, dance, films, other cultural products Symbols |
| | Agents <i>(Actuality)</i> | Habits/habitus Institutions, organizations Communities | Intentions Social interactions Power as ability to act | Identities as self-images, other-images; identifications Discursive and performance strategies Indexes |
| | Structures <i>(Possibility)</i> | Forces of production (e.g., economic, communicational, familial?) Bodies | Social positions Social relations of production Power as domination, exploitation | Image schemata, basic-level categories; meaning structures; structures of feelings? Icons |

of society, and the reasons behind some of my choices must await fuller treatment elsewhere. Nevertheless, the majority are, I think, clear. Starting from the lower left cell and working counterclockwise, we find the material structures of society (forces of production and human bodies), including the economic structure, the framework of communication, and possibly family structures.¹³ Out of these material processes emerge social relations and forms of power such as domination, subordination, and exploitation. From both the material and sociological dynamics emerge meanings in the form of basic concepts and images, which are usually or principally iconic. Capitalism, for example, generates icons of commodity exchange as the basic social relation. Conversely, our understanding of underlying structures depends on our ability to generate iconic models of them. Image schemata and basic categories conjoin to form meaning-structures that act as generative principles for higher-level forms of meaning. (Due to the highly imagistic and qualitative nature of feelings, I have tentatively placed Raymond Williams' concept of "structures of feelings" here as well.) These image schemata provide the basis for the images of Self and Other that constitute ideas of social identity and effect social identifications (first cell up); they also organize transposable discursive and performative strategies or norms of behavior. Since identity-imagery and meaning-strategies are distinguished according to agents' social positions, they are indexes of agents' locations in social space (see Bourdieu 1984).

Continuing counterclockwise from the upper right cell, identity-imagery and meaning-strategies provide the most immediate social bases for the explicit articulation of discourses in such forms as theories, ideologies, and cultural products. Such articulations depend on Peircean symbols and have symbolic effects (among them, their potential claim to generality or universality). They also supply justifications and/or rationalizations (whether real or pretended) for agents' actions, which take the form of intended meanings (see the next cell over). Psychological dynamics are a significant part of intentionality, but these too are socially conditioned and social in form, as indicated by thought's character as inner speech. Note that, like agents and structures, discourses are connected to a specific form of power: the power to choose, including the choice of how to interpret and express things. Expressions, of course, must take material form (upper left cell); but as Peirce argues, the semiotic process may ultimately generate habits, habit-changes, and habitus within agents. This is part of the organization and institutionalization of agents. Thus the individual body as a mode of agency has structural and semiotic effects incorporated within it: it is established as a political body. It also resides within a body politic – agency depends upon and accumulates the ability to act by means of collectivities, such as organizations, informal social groups, governments, and communities. Transformations in such modes of embodied agency can, of course, transform the material structures with which I began. At the center, however, is embodied intentional agency (both individual and group), which provides the motive force behind social processes.

Of course, the cycle that I have used for presentation purposes is not the only pattern through which these processes work: the various elements interact in many different ways (Archer 1995 provides a good starting-point). But by distinguishing among the ontological and phenomenological dimensions of social activity, we can I think obtain sharper insight into the still-vexing issue of society's concept-dependence. As Bhaskar observes, society depends on concepts but is not exhausted by them (e.g., Bhaskar 1995: 50); as Archer argues, the thesis of society's concept dependence must primarily refer to the concepts of the long dead (Archer 1995: 145–47). However, Archer's argument mainly concerns the structural level – things look quite different at the agential level, which is far more volatile. There, discourses are critical for establishing identities and alliances, differences and oppositions. To that degree, poststructuralist critiques (such as Laclau and Mouffe 1985) rightly emphasize the significance of discursive articulation and the political valence of struggles over meaning. Yet there would be no point to those struggles, no stakes involved, were it not that the processes of forming and maintaining alliances, oppositions, and organizational arrangements often consume limited resources, dedicate the future use of others, can seldom readily be undone – and ultimately reproduce or transform the fundamental structures of society, including the structures of power.

Critical realism can fill many gaps in its semiotic theory by adopting a Peircean understanding of signs and semiosis, which grasps both the intransitive dimension of reality, and the semiotic nature of our mental access to it in the transitive dimension. Critical realism can find a clearer place in its ontology for experiences and concepts by understanding them as signs. On that basis we can rework Bhaskar's third ontological domain from the subjective to the semiotic, and thereby help critical realism shed remaining threads of anthropocentrism, ethnocentrism, and cognitivism. This change also makes it possible to offer a coherent analysis of the relationship between ontological domains, by adopting the concept of emergence. The new domains of the real, the actual, and the semiotic underlie a revised ontology of society, replacing the structure/agents dyad with a triad of structures, agents, and discourses, each of which bears material, sociological, and meaningful aspects. Because Peircean semiotics recognizes the body's roles in the production of meaning, it also allows critical realism to gain a firmer grasp of the nonrational and noncognitive aspects of society, including the roles of images, feelings, habits and embodiment. Critical realism thereby obtains a fuller theory of social ontology, one that incorporates the role of semiosis, and promises a deeper account of the dynamics of power.

Tobin Nellhaus

Department of Theatre Research

University of Helsinki, Box 4

00014 Helsinki

Finland

Acknowledgements I would like to express my gratitude to the American Council of Learned Societies for a fellowship which made this article possible. I would also like to thank Howard Engelskirchen, Ruth Groff, Assunta Kent, and Doug Porpora for reading an earlier version of this paper, and the Bhaskar e-mail discussion list in general for wrestling with me over several of the points I make here; sometimes they even won!

NOTES

¹ Pronounced “purse.” All references to Peirce’s writings will be to his *Collected Papers*, cited by using the abbreviation *CP* followed by the volume number and paragraph number (e.g., *CP* 5.421).

² Symptomatic of the strange treatment Peirce has received, his word “semiotics” has become the customary term for the study of signs, even though the theory constituting that study is usually Saussurean. I use “semiology” to refer to Saussurean theories, and “semiotics” for Peircean approaches. It is unclear to me whether Bhaskar has read much Peirce, although he does accredit the latter for introducing the concept of retrodution into modern thought (Bhaskar 1994: 18).

³ I have adopted the standard depiction of the Peircean sign, which rotates Bhaskar’s triangle.

⁴ Actually, Peirce identified ten major classes of signs, and in some writings indicated that there are as many as 66, though he never defined them all. But most scholars work with either the ten classes or the three main types (as did Peirce himself), and for present purposes those three suffice.

⁵ Peirce left the question of the representamen’s materiality unexplored. Saussure defined the signifier as a mental pattern, partly in order to handle the distinction between the actually-produced sound (phone), with all its variations, and the recognized sound (phoneme). I think that with Peirce, the representamen can be either material or mental, and that the phone/phoneme problem can be treated either by taking the phone as a “replica” of a sign (see *CP* 4.447, 4.500), or as an icon of a habitualized mental pattern. Also, although Peirce connects the icon, index, and symbol to the representamen, I would prefer to view it as defining the entire sign-structure.

⁶ This connection between Peirce and Bourdieu was first suggested, to my knowledge, in Kent 1996: 53. I pursue the idea further in *The Performance of Hegemony* (in progress).

⁷ Marxism has long been considered a form of critical realism. Voloshinov was probably in fact Mikhail Bakhtin; on the compatibility of Voloshinov’s analysis with critical realism, see Bernard-Donals 1994.

⁸ Bhaskar’s original formulation of these domains defined the third as the *empirical*, consisting of experience (1978). This still occasionally appears, but in more recent work (1993; 1994) he often redefines it as the subjective, which includes both experiences and concepts. I am not aware of any text in which he explains or argues for this change. While I think the later version is superior insofar as it is more encompassing, both versions have many of the same problems.

⁹ I borrow the term “semiosic” from Kent 1996: 52–54.

¹⁰ Peirce discusses his categories throughout his writings; the most elaborate discussions appear in Volume 1 of the *Collected Papers*. However, some of the key sources for my interpretation (or if you prefer, alteration) are at *CP* 1.345, 1.422, 1.537, 2.235–42.

¹¹ Bhaskar's "social cube," which adds relations with nature and agents' "subjectivity" to the usual agents/structures pair, is somewhat of an improvement but still does not account for signs (Bhaskar 1993: 160–64; 1994: 96–100).

¹² On the three types of explanation, see also Nellhaus 1993: 522–23. While the three tiers (structure, agents, and discourses) bear some resemblance to Marx's notion of an economic base upon which rest political and ideological superstructures, this resemblance is superficial. First, Marx assigns ideology a separate sphere, whereas I view it as an element at every level (even though its role varies). Second, Marx's concept refers to particular sorts of institutions; my analysis is ontological rather than institutional. Finally, Marx assumes that society can have only one fundamental social structure, that of economic production; I allow for several such structures, and suggest that the belief that there must be a single base structure is, "basically," a metaphysical prejudice.

¹³ Sex-gender systems are notoriously complex, and the current emphasis in feminist and gender studies appears to be on the discursive construction of gender rather than on material relations, so I do not feel our present knowledge allows us to state clearly how its aspects fit into this analysis. One reason for this difficulty is undoubtedly the fact that so many different elements derive from, converge upon, and/or are sedimented within the body; another is the complex relationship between the division/organization of sexual practices and the sexual (i.e., gendered) division/organization of nonsexual (or perhaps "nonsexual") practices. I am currently developing a critical realist theory of communication practices in *The Performance of Hegemony* (in progress).

REFERENCES

- ARCHER, M.S. (1995). *Realist Social Theory: The Morphogenetic Approach*. Cambridge: Cambridge University Press.
- ARCHER, M.S. (1996). *Culture and Agency: The Place of Culture in Social Theory*. Revised ed. Cambridge: Cambridge University Press.
- BERNARD-DONALS, M.F. (1994). *Mikhail Bakhtin: Between Phenomenology and Marxism*. Cambridge: Cambridge University Press.
- BHASKAR, R. (1978). *A Realist Theory of Knowledge*. 2nd ed. Sussex: Harvester Press; Atlantic Highlands, NJ: Humanities Press.
- BHASKAR, R. (1989). *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*. 2nd ed. New York: Harvester Wheatsheaf.
- BHASKAR, R. (1993). *Dialectic: The Pulse of Freedom*. London: Verso.
- BHASKAR, R. (1994). *Plato Etc.: The Problems of Philosophy and Their Resolution*. London: Verso.
- BOURDIEU, P. (1984). *Distinction: A Social Critique of the Judgement of Taste*. Trans. R. Nice. Cambridge: Harvard University Press.
- COLAPIETRO, V.M. (1989). *Peirce's Approach to the Self: A Semiotic Perspective on Human Subjectivity*. Albany: State University of New York Press.
- DE LAURETIS, T. (1984). *Alice Doesn't: Feminism, Semiotics, Cinema*. Bloomington: Indiana University Press.
- DE LAURETIS, T. (1987). *Technologies of Gender: Essays on Theory, Film, and Fiction*. Bloomington: Indiana University Press.
- JOHNSON, M. (1987). *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press.
- KENT, A. (1996). *Maria Irene Fomes and Her Critics*. Westport, Conn.: Greenwood Press.
- LACLAU, E. & MOUFFE, C. (1985). *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*. London: Verso.

- NELLHAUS, T. (1993). Science, History, Theater: Theorizing in Two Alternatives to Positivism. *Theatre Journal*, **45**, 505–27.
- PEIRCE, C.S. (1965–66). *Collected Papers*. Ed. Charles Hartshorne and Paul Weiss. 8 vols. Cambridge: Belknap Press of Harvard University Press.
- REISS, T.J. (1982). *The Discourse of Modernism*. Ithaca, N.Y.: Cornell University Press.
- SAUSSURE, F. DE. (1986). *Course in General Linguistics*. Trans. R. Harris. LaSalle, Ill.: Open Court.
- VERNANT, J-P. & VIDAL-NAQUET, P. (1990). *Myth and Tragedy in Ancient Greece*. Trans. J. Lloyd. New York: Zone Books.
- VOLOSHINOV, V.N. (1973). *Marxism and the Philosophy of Language*. Trans. L. Matejka and I.R. Titunik. Cambridge: Harvard University Press.
- WILEY, N. (1994). *The Semiotic Self*. Chicago: University of Chicago Press.