Is the Semiosic Sphere's Center Everywhere and its Circumference Nowhere?

Susan Petrilli and Augusto Ponzio's *Semiotics Unbounded: Interpretive Routes through the Open Network of Signs* (Toronto: University of Toronto Press, 2005) (hereafter SU) emerges from a tenacious, work-ethic oriented, and ambitiously designed disquisition on the sign and a response to various semiotic theories that were developed during the latter decades of the nineteenth century. At the outset I must confess that my problem is: How can I do justice to this massive volume in a couple of dozen or so pages? If a valid review there may be regarding SU, it can hardly be addressed to more than a handful of the various and sundry topics therein contained. So, it's a piece-meal approach, the focus of which will be SU's critique of those lingering vestiges of the glottocentric, Saussurrean, code-based, bivalent logic-based theory of the sign.

1.0 Unbounded? How so?

SU begins thus:

The boundaries of semiotics are determined by the nature of its object of study—that is to say, by the nature of signs. In fact, when we consider the development of semiotics, it becomes evident that progress in the general science of signs depends on the fact that signs are gradually being discovered where it was once thought there were none. (xvii)

In addition to a 'gradual discovery' of signs, I would add—and I am certain SU would agree—that:

(1) signs are always in the process of their becoming 're-invented', or otherwise 're-imagined', and

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(2) signs now making up the repertoire of our arts, sciences, and socio-politico-economic and cultural concoctions, are incessantly becoming other signs in a 'transculturaling', 'ethnoconverging' sense.

Which is to say that virtually everything that *is*, is of the nature of *signness becoming*. After all, what are signs that they may convergingly become other signs and begin taking on a life of their own? And what are we, living signs, that in converging with our signs of mind, with the signs of others, and with the world as signs, we may swimmingly flow along within the now meandering, now swirling, now whirlpooling, now whitewaterly cascading stream of semiosis? Indeed, we might ask: Black holes, quarks and superstrings, and such? (Wheeler 1998); Artworks, by virtue of gentle to obsessive musings? (Margolis 1999); America as 'invented' more than 'discovered', 'fashioned' more than 'found'? (O'Gorman 1961); Worldmaking, by the good grace of dreams, illusions, and desires? (Goodman 1978); Or, art as emergent process rather than algorithmic generation, or even romantic organicist spontaneity? (merrell 2006a). It's all of the nature of becomingness: the processual *becoming of being and the being of becoming*, with no finality in sight (Margolis 1993).

In a comparable vein, we read that: 'Peirce's conception of the sign extended the boundaries of semiotics: the universe is permeated with signs' (SU xvii). And shortly thereafter, that the 'boundaries of semiotics are also determined by the field's relationships with other sciences' (SU xvii). If the universe is permeated with signs; if virtually all that is, is a sign; then where is the center, and where the periphery of this semiosic universe? And if there is neither any definite center as fulcrum point nor any accessible periphery, then can we really speak of definite boundaries at all? God, nature, or the universe as it were, from Plato's Timaeus to Nicholas of Cusa to Blaise Pascal, and finally, to Albert Einstein, are variously conceived as a vast sphere whose center is everywhere and whose circumference is nowhere. Indeed, as Jorge Luis Borges once speculated, it may be 'that universal history is the history of the different intonations given a handful of metaphors' (1962: 192).

Historian of science Gerald Holton says much the same regarding what he calls 'themata' (1988, Holton and Brush 2001).

But this topic must await its fifteen minutes under the spotlight during a later stage of my review. For now, other more pressing preparatory issues are calling for attention.

2.0 Stooge, or Sage?

SU tells us: 'If the Sign is the leading actor in semiosis, the Interpretant is its indispensable stooge' (8). 'Preposterous!', comes the gut response. Then, with cooler heads prevailing, we think about it. An *interpretant*, entailing triadic collaboration of the sign, its respective object (or act or event), and some potential *interpreter-interpretant*, is always prepared to take over duties as another sign (representamen), another object (or act or event), and/or another interpreter-interpretant, herself as sign.

In this respect, the interpretant is perhaps more properly said an *under-study*, whose role is not necessarily subordinate or compliant, but rather, that of a *complementary* character in the semiosic drama playing itself out toward some indefinite end. So, who are the other characters? They consist of the *sign* (representamen), the *object*, the *interpreter-interpretant*, and indeed, all *signs*, *objects*, and *sign makers* and *takers* as well, within the entire *semiosic* flow. At the outset, then, I would suggest that: (1) *semiosic complementarity* must be the watchword, and that (2) whichever component of a sign happens to be foregrounded, it always finds itself in the process of ceding its leading role to some other semiotic character emerging from the background.

In this manner, when the interpretant doesn't enjoy the leading role, it *complements* whoever or whatever ephemerally plays that role until the moment when it can re-surface and become the lead vocalist. *Complementation* evokes the notion of ambiguity, like figure-ground, particle-wave, or

Yin-Yang, such that what *is*, is exclusively neither purely what it *is* nor what it *is* not, but rather, it is always in the process of *becoming something other than what it was becoming*. Thus the interpretant, when not playing the leading role, is an *under-study*, and the same is to be said of all other signbecomings. Rather than *stooge*, the interpretant, another sign in its own right which is always in the process of becoming itself yet another sign, is in the process of *sage-becoming*.

Well, then, I don't really disagree with SU after all. Or do I? Throughout SU, the authors strike a distinction between what they call 'code semiotics' and 'interpretation semiotics' (12-13, 301-11). The first comes from Saussurean semiology, early work in information theory, and structuralism; the second is Peircean through and through. The first holds that interpretation is decodification, of mechanical character; the second prescribes meaning in terms of 'ongoing, open processes that lack the guarantees offered by appeal to a code regulating exchange relations between signifiers and signifieds' (SU xix). The first entails rigid codes and rules demanding linear generativity and I-told-you-so products; the second involves pliable, improvising, on-the-spot maneuvers, when making and taking signs along radically nonlinear streams and tributaries.

Moreover, Peirce's ongoing, flowing notion of semiosis is inherently dialogic in nature. Thus, the authors of SU tell us, association between Peirce and Mikhail Bakhtin would be deemed appropriate. This is no mere *dialectical* approach, but *dialogical*, they stress time and again. Yet, they systematically and methodically pit 'code semiotics' against 'interpretation semiotics' to the extent that at least this reader is left with the impression that there is an agonistic dialectic implied in SU for which there can only roughly be any adequate synthesis—especially in their occasionally almost disparaging critique of Umberto Eco. However, not entirely. For SU also implies, here and there, the notion that 'interpretation semiotics' includes, as an inherent component within its nature as ongoing process, Manicheistic conflicts, that may be edified as full blown 'binary oppositions',

though ephemerally so. Regarding conflicting dualisms, I've already brought up SU's idea of a 'code semiotics/interpretation semiotics' distinction. That, however, is a dichotomy of global scope.² Allow me to begin on a more humble note.

2.1 Within SU's interpretation of Peirce on signs

In spite of our good binary-barring intentions, our inextricable dwelling place within language as the major tool of expression sooner or later finds us straddling some distinction or other. Such is the inevitable force of language, and hence to a large extent of thought. How could we expect any more of SU? Even in its interpretation of Peirce? Yet, SU claims it makes a gallant effort to bar binaries.

We read that the 'minimal relationship allowing for something to act as a sign is triadic', and it involves 'something objective' (the object of the sign, whether mental or physical), the 'interpreted' (the object's meaning), and the 'interpretant' (by way of which the object takes on meaning). The 'interpreted-interpretant' relation is involved in a minimal 'triadic' relation, that is, if the 'interpreted' refers to the object of 'interpretation'. We are to assume, I would venture to say, that this minimal relation fades, when the 'interpretant' goes on to become another 'sign' or another 'object' and hence a more developed 'interpretation' and its accompanying 'signs' emerges. This is a somewhat unique method for clarifying the confusion that often ensues when a newcomer begins reading Peirce on signs (SU 7). It has heuristic value, at least.

But SU's effort toward clarification might serve to confuse the issue further. Where can we find a 'minimal relationship allowing for something to act as a sign', if according to Peirce we begin wherever and whenever we are, within the semiosic process—unlike Descartes's hyper-conscious intuition, capable of drilling down to the absolute core to begin from scratch at some definite here

and now. Assuming that we can grasp onto some 'minimum', then do not the 'interpreted' and the 'interpretant' tend to stand up and against each other in some sort of binary fashion? That is to say, is not the 'interpreted-interpretant' somewhat like the two sides of a sheet of paper?—if I may make use of Saussure's metaphor regarding the signifier/signified pair of terms. In other words, the object enjoys meaning thanks to the interpretant that enabled its interpretation, thus bringing about the object as interpreted. Then, if we stash the object away in the closet and entertain the idea of a binary pair—interpretant and interpreted—can we not get along with nothing more than the sign vehicle and its meaning in terms of an *ad hoc* semiotic model that has hardly any use for the 'objective' world of the mind or of the world? If so, then would our sign theory not be reduced to some form of nominalism, and mental nominalism to boot? Perhaps even in the binary Saussurean sense? Quite possibly so, I would suspect.

However, on the next page *SU* sports one of Peirce's multiple definitions of the sign: 'A *Sign*, or *Representamen*, is a First which stands in such a genuine triadic relation to a Second, called its Object, as to be capable of determining a Third, called its Interpretant, to assume the same triadic relation to its Object in which it stands itself to the same Object' (*CP* 2.274). When reformulating this definition by including the term, 'mediation', we have: The interpretant creates a mediary process between the representamen and its respective semiotic object in the same way that it creates a concomitant mediary process between itself and each of the other two components to make up the triadic sign. Now we have a better sense of a triadic semiotic 'democracy' allowing for interchange between representamen, object, and interpretant. They can flow in and out of one another such that at a given moment it is well-nigh impossible to say: 'Here we have the representamen and nothing but the representamen, here, exclusively the interpretant, and here, the solitary object'. In other words, we have something more akin to process. *SU* thus stands a chance of vindication, it would appear.

In fact, a few paragraphs later, we read that: 'The meaning of a sign is a response, an interpretant that calls for another response, another interpretant. This suggests to us the dialogic nature of sign and semiosis. A sign has its meaning in another sign, which responds to it and is in turn a sign if there is another sign to respond and interpret it, and so on ad infinitum' (SU 9). So it seems that SU is on the right track, in spite of its occasional lapse into two-way distinctions—after all is said and done, who among us is innocent in this respect?

2.2 Peirce's signs on a more contemporary note

Indeed, the Peircean semiosic process by and large aids and abets philosopher Hilary Putnam's pragmatic concept of *meaning* (1975, 1981, 1983). Putnam refuses to compromise on his reservations regarding traditional theories of meaning. He argues that there is no 'God's-eye view' of the world. There is no omniscient grasp of the whole context within which meaning emerges, in all its possible ramifications. The world is simply too rich for the poverty of our interpretive capacities. Consequently:

- (1) Contra Saussure, we cannot locate meaning in the head as if it were a matter of specifying a particular set of neurons that fire when properly stimulated: *meaning isn't in the head*.
- (2) Contra 'word magic', a sign is not the carrier of information as if it were endowed with some spiritual force: *meaning isn't in the sign*.
- (3) Contra the 'causality theory' of reference and meaning, there is no object of the sign such that it provokes its perceivers and conceivers to interpret it in a certain way: *meaning isn't in the thing with which the sign interacts*.

(4) Contra 'information theory', there is no medium—a sort of 'conduit tube'—through which signs are en-coded, and their receiver re-codes the signs to internalize their meaning:

*meaning isn't mechanically transferred through the medium of communication.

So where is meaning?—one might wish to retort. It's in the entire, processual, mind-numbingly complex situational socio-cultural context, including signs and their makers' and takers' past experiences, present experiences, and anticipation of future experiences. But if there is no 'God's-eye view', then how can we adequately know the context? We can't. That is, we can have no *total grasp* of the context. For we are part of the process and thus we cannot by privy to the whole, which ultimately includes the entire sphere of semiosis. Ah, so now we've arrived at the crux of the issue. We're immanent, within the sphere of semiosis, wherever and whenever we are. Actually, *SU* says so much in many ways (for example, 143-44).

But this is heady stuff. In order hopefully to approach this topic more adequately, let me get on with a more concrete episode in my story.

3.0 Dialogic imaginings

Both Peirce and Bakhtin highlight dialogic interaction. The Peircean self, 'I', dialogues with its other self, 'me', as well as with other selves within its community and with its physical other (the natural world within which it processually moves). Bakhtin, who writes that the idea of 'dialogue' is inherent in 'dialogism', can be interpreted along commensurate lines.

SU makes the Bakhtinian distinction between 'formal' dialogism and 'substantial' dialogism, opting for the latter (SU 23-24). In a nutshell, 'formal' dialogism includes the Saussurean signifier coming into play within the concrete unfolding of a dialogue, in conjunction with the signified in abstract interrelations with what is verbalized and 'language' (langue). 'Substantial' dialogism takes

this entire process as itself dialogic, which involves concrete language (*parole*), or actual verbal interaction, combining with language (*langue*) to create concrete, contextualized dialogistic process. Dialogism, in this sense, is the *process of dialoguing* that organizes a cultural world's meaning (Bakhtin 1981: 279-82). Thus, the original *signifier* (formalized verbal interaction) becomes an enriched *signifier* (concrete substantial verbal interaction) (Pechey 1989).³ For Bakhtin, then, Saussurean semiology deals primarily with transmission of signs by a ready-made code, whereas in living speech, communication is a process without necessary mechanical connection to any code, within some specific context. A context is incessantly in flux, for it is process; a code entails linear generativity according to some set of rules. A code is a technical means for transmitting information contained within the signs, and nothing more; hence its purpose undermines the input of context and environment (Bakhtin 1986: 130). In *SU*'s way of putting this, substantial dialogue is 'an embodied, intercorporeal expression of the involvement of one's body with the body of another—thus, it is illusory to think that the body is individual, separate, and autonomous ... [it] is the "grotesque body" (24-25).

Petrilli and Ponzio thus embrace Bakhtin's 'critique of dialogic reason', which is a critique of the 'logic of identity' entailing linear, ossified, monologic, and totalizing dialectics (*SU* 24). This calls for 'responsibility without alibis', 'responsibility that cannot be deferred insofar as it concerns existential "architectonics," relations with the I, the world, others' (*SU* 24). Bakhtinian dialogism must have some *other* in order that there may be concrete interaction. Kant had his 'critique of pure reason', and Sartre his 'critique of dialectical reason', but according to *SU*, both of them fall short of Bakhtin's critique, which calls for dialogue as the impossibility of 'indifference' toward the concrete other, as 'unindifference' toward the other. Indifference threatens to degenerate into hostility, hatred, ethnocentrism, racism, violence, and wars, since the indifferent subject views the other as if from an

autonomous, neutral, 'God's-eye' view (Putnam 1975, 1988), or in other words a 'view from nowhere' (Nagel 1986). What is worse, it presupposes the subject as repository of individualism, and identity of the individual which sets it apart from all other individuals—as if they were all atoms careening about in an enclosed container.

In a Peircean manner of putting SU's project, the 'critique of dialogic reason' chiefly includes Secondness and Thirdness, as do the critiques of 'pure reason' and 'dialectical reason', but, unlike the latter two critiques, it also includes a large dose of Firstness, abduction, iconicity, and concrete corporeality. Individual identity and autonomy, in other words, are not the 'oneness' of Firstness, for they imply what Alfred North Whitehead (1924) calls the 'fallacy of misplaced concreteness' and of 'simple location'. Individual identity and autonomy are considered in the abstract; they are divorced from the body, from Firstness creatively giving rise to feelings and sensations, which in turn gives rise to abducted images and their interdependent counterparts. The critique of individual identity is the critique of purely abstract thought devoid of what Peirce called 'concrete reasonableness' (SU 144-46).

3.1 SU contra Cartesian individualism

In SU's critique of the Cartesian independent, self-directed, self-sufficient individual, it adopts a conception of the self and its incipient identity that is somewhat comparable to Max Weber's (1930) understanding of the modern, 'disenchanted' individual. Weber's concept of modernity is descriptive, in contrast to normative considerations. According to Weber, modernity entails a note of pessimism. Rationalization, bureaucratization, and the mechanization of society create a 'disenchantment of the world'. But there is also a positive note: individual autonomy, dynamism, industrious activity, creativity, a spirit of development, and the hoary idea of indefinite progress. The

autonomy of the will permits a freeing from tradition, and an acceptance of the fact that, to be free, and to recognize that freedom, is the culmination of self-actualization—even though, inexorably, some degree of 'disenchantment' ensues.

Weber's construction of meaning and interpretation lies in choices and actions on the part of individuals. This individual moral autonomy is diametrically opposed to tradition, which hands down values as givens (hence unquestioned principles for conducting one's affairs within one's community). Individual moral autonomy entails a victory of formal, instrumental, purposive rationality over value-saturated construction of meaning, thinking, and modes of behavior. This understanding of the individual's freedom and autonomy creates dull, routine social roles, and bureaucratized, rigidly structured and hierarchized societies, such that the individual finds her/himself caught within an 'iron cage' (see especially Taylor 1991). There is, then, another negative side to individual freedom: it can be abused, resulting in a Foucauldian society of power plays by those who have knowledge and have fought and kicked their way to the top. Thus there is both a romantic hero and the tragic hero in the grand drama of modernity.

4.0 Let's put this in somewhat of a Peircean light

Consider individualism vs. the community. Individualism presumably breeds identity, and a collection of identity-clad individuals makes up a somewhat loose-knit community: here we have *chiefly* Secondness, or *particularity*. But as *chiefly* Secondness, the community is sorely lacking. There needs be Firstness and Thirdness. We find Thirdness at its most extreme in hyperconscious *meta-mentation* in university settings, which thrive on *generality* and abstraction. And the creative juices of the artist and original thinker and practitioner lie *chiefly* within Firstness, or *vagueness*.

Vagueness and generality, on the one hand, are two of the principle tendencies perpetually playing

out their roles within the flow of semiosis. On the other hand, *particularity*, the actual objects, acts, and events of the physical world, and of individual and community mental and social worlds, involves timespace slices beginning their emerging to play out their role in the arena of everyday life practices as Seconds.⁵

All three processes are necessary. They are *interdependent* and *interrelated*. There is no static taxonomy here, no rigid categorization, but interweaving and flowing in and out and in again, of all three tendencies. At every moment, a portion of the Firstness of signs' possibilities begin becoming Secondness and Secondness and Firstness flow with incoming Thirdness and Thirdness can begin disguising itself as either Firstness or Secondness or some concoction of the two to give way to the beginning of some other ephemeral manifestation of Thirdness, and so on, without conceivable end.

4.1 SU on a somewhat 'logical' note, in this light

By and large, with respect to the 'critique of dialogic reason', SU is on target, that is, if SU takes its cues chiefly from Peirce and Bakhtin and deflates the 'logic of identity' and pervading 'abstraction', in favor of a 'logic of otherness' along the lines of what it terms a 'semiodialogic' perspective (SU 481).

I would suggest, however, that the authors should become more critical of Charles Morris's empirical positivist, behaviorist posture. In the first place, Morris was in tune with his times regarding his contribution to the 'Unified Sciences' idea. But that project was part and parcel of logical positivist philosophy's reductionist effort to found human knowledge within logic and mathematics, and when that didn't pay proper dividends, to found it in a hierarchical view of the sciences, beginning with what was then considered the queen of all sciences, physics.⁶

In the second place, a critique of the 'logic of identity', involving the classical Aristotelian logical Principle of Identity, should also imply a critique of the Principles of Non-Contradiction and Excluded-Middle. If identity is malleable more than fixed, then whatever identity there may be at a given timespace slice, it is always in the process of *becoming* what it was *not* becoming. This calls for a degree of contradiction embracing rather than intransigent contradiction barring. Which is also to say that, in addition to what *is* and what *is not*, there is always *something else* possibly in the process of its emergent becoming. So rather than Non-Contradiction and Excluded-Middles, we should entertain the idea of Included-Middles, whether contradictory or not, for something can at some unexpected moment slip through the virgule separating what *is* from what *is not*, and emerge into the light of day.

What, then, is the meaning of 'Not Both A and Not-A' of the Non-Contradiction Principle, and 'Either A or Not-A' of the Excluded-Middle Principle? That Both one alternative And another alternative, as possibilities, stand a greater to lesser chance of beginning their becoming somewhere and somewhen? That Neither the one alternative Nor the other one should be set up as a hard-rock, immutable thing? And that at any moment something else, something new, may be emerging to alter that nature of that which is now passing on-becoming in order to make way for its successor-becoming? What is the moral to the story? I would suggest that: (1) given vestiges of positivism inextricably lodged within our mind-set, we should struggle to free ourselves of whichever of those vestiges that we can, and do the best with what is left, and that (2) we should strive to define ourselves within some form or other of some 'other logic', vaguely suggested by *SU*'s 'semiodialogic'. However, a question pops up....

4.2 What is individualism without identity?

SU judiciously, and on a Peircean note, brings up the idea of 'identity' in terms of what might be termed 'self-identity'. Self-identity bears on that deadly concept, individualism once again, which has run rampant throughout the so-called developed Western societies, culminating in selfish 'what's-in-it-for-me-and-everybody-else-be-damned' attitudes. SU tells us:

Against the concepts of 'personality,' 'personal self,' and 'individual self,' all of which theorize an individual, finite and defined self, Peirce contrasts the concept of self in dialogic communion with other selves. The finite self or 'personal self' is an 'illusory phenomenon,' yet insofar as human beings are egotistical they believe they can live and flourish separately from others, separately from the human community to which they in fact belong. And to the extent that they believe this, they are creating the conditions for illusory forms of isolation. (50-51)

Isolation and integration, solitude and solidarity, seclusion and communion, discontinuity and continuity. That is the inevitable tension we are all caught up in, 'between the inward depths of the human spirit and the outward expressions of those inward depths' (Colapietro 1989: 118, *SU* 51). In an oft-cited article, Charles Taylor (1984) writes that every person is her/his own

measure: I must live my life my way, express my

individuality and my own identity. But Petrilli and Ponzio,

like Colapietro, react to this over-disjunctive form of identity

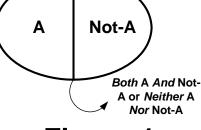


Figure 1

and individualism. Self-identity is pliable, and it exists as the integral part of some community.

There is no fixed self-identity, no self-identity in contrast to or in contradiction with other self-identities: self-identity is always *becoming something other*. Nor is there any Excluded-Middle between one self-identity and another one, especially if they hail from the same community or sub-

community. Since all individuals are always *becoming*, there is some surfacing of what might conceivably have been taken as an exclusionary boundary between two alternatives, which often seem diametrically opposed.

In order perhaps to find a conceptual hand-hold on this problem, I will depart from my commentary on SU for a few moments and turn to a few humble notions I've attempted to develop elsewhere (2004, 2005, 2006b, 2006c). Figure 1 (place about here) gives us a glimpse into the becoming I mentioned in the previous paragraph—granted, process presented in the form of a static diagram can be no more than an unfaithful image, but I hardly have any alternative. In this image we have identity: A is A. We have Non-Contradiction: A cannot be Not-A. And we have Excluded-Middle: Either a or Not-A. And the line of demarcation is just that: a neutral mark of distinction. Well and good? No. Not really.

No, for what is the line anyway? Peirce goes at length to argue that we can take the line as not A, and not Not-A. However, as not A, it has something in common with Not-A, and as not Not-A, it enjoys commonality with A. It is A-less and it is Not-A-less, and at the same time it is A-ness and it is not-A-ness. So it is in a sense *both* of the two, and it is *neither* of the two. In a sense, it throws the Principles of Non-Contradiction and Excluded-Middle for a loop. Indeed, we can conceive of the line as an Included-Middle from which something novel, new, can somewhere and somewhen begin its process of becoming something other than whatever was becoming. This conception, in brief, allows for what Whitehead (1924) calls the 'creative advance' of nature. By extension we can Peirceanly dub it the 'creative advance' of the dance of life, of feeling and thought, all of semiotic import (*CP*: 4.512, 6.193, 6.203-04, 6.260).

Figure 1 disallows the notion of proud, autonomous individuality, and it embraces community, commonality, communion. So where's the logic in all this? It's within the entirety of

Figure 1; it's contained within the whole diagram, that whole evincing what Peirce called a 'more general logic', or a 'logic of abduction'.

5.0 Why an 'other logic'?

It's not that *SU* doesn't pay enough lip service to the notion of 'logic'. The reader is literally flooded with phrases containing the term. There's 'logic of otherness' (*SU* 41, 275), 'logic that binds interpretants' or 'dia-logic' (75), 'logic of signs' (141), 'logic of the text' (146), 'logic of production' (282), 'logic of dialogism' (282), 'logic of extralocalization' (283), 'logic of love' (366), 'logic of giving and excess' (370), 'transcendental logic' (431), 'logic of concrete abstractions' (480), 'question-and-answer logic' (482), 'logic of repetition' (483), 'argumentative logic' (491), and 'logic of purchase and sale of labor' (529), to mention a scattering of them. I must confess that I haven't an inkling as to what these 'logics' are all about. At any rate, now that I brought up the topic of 'logic', perhaps I should turn to *SU*'s account of *abduction*, *induction*, and *deduction*, but most specifically of *abduction*, since there, Peirce writes on many occasions, we can get a feel for 'logic' in its broadest possible sense.

What exactly is abduction? Actually, there is no 'exactly' regarding abduction, for the abductive process is at once as simple and as mind-bogglingly complex as Peirce's categories, *One*, *Two*, *Three*. One of the problems is that in Peirce studies, *abduction*, *induction*, and *deduction* are more often than not construed chiefly in terms of classical logical principles. This is linear binary logic, *Two*-way logic. Binary logic often ignores, or conveniently forgets or hides away in the closet, those other forms, *One* and *Three*. Put the numbers together in *interdependent*, *interactive interrelatedness*, however, and we have a genuine sense of *Firstness*, *Secondness*, and *Thirdness*: Peirce's categories.⁷

5.1 *On the purely possible*

But there is more to it than that, infinitely more, so to speak. Before there is anything at all, there is the sheer *nothing of possibility*. This is *pure possibility*, an infinitesimal portion of which can be selected and actualized at each and every moment. Eventually, the selection and actualization of more and more of what pure possibility has to offer moves us toward a sense of continuity, rather than a collection of disparate particularities.

Look at it this way, if you will. Suppose we begin with zero, pure possibility. Then we draw a one-dimensional line (Firstness). From the line, we construct a binary tree on a two-dimensional plane (Secondness, the basis for classical binary logic). From the tree along any and all possible directions in three-dimensional space, we create a world. And the world becomes richer as it flows along in time. These steps are tantamount to the emergence of our world, radiating 'like light', as it perpetuates its process of emerging (NEM IV: 127-28). This is vintage Peirce. It reveals the fallacy of splitting subject from object, inner from outer, body from mind, and self from world. It entails the impossibility of isolating the categories and of keeping abduction, induction and deduction apart.

How so? Peirce insisted that logic, mathematics, and thought in general are possible only by way of imagistic, iconic, or diagrammatic form, and that all developed signs, embodied in one or another form of natural or artificial language, imply the underlying presence of possible quality. Peirce once wrote to William James that 'you do not fully appreciate possibility. Mathematics,... deals with nothing but hypothetical states of things, which far more often than not are either known to be false or extremely dubious. And ... possibility is subjective, in us, dreams' (*NEM* III: 875). Movement is from pure possibility to quality (Firstness, *abduction*) and then to hypotheses (Thirdness, *deduction*) that can be tentatively and always fallibly judged true or false (Secondness,

induction). I must elaborate somewhat on this triadicity before directly entering into a discussion of abduction.

5.2 Firstness as possibility

Let us, then, talk about *possibility* by way of *Firstness*. This sort of talk is not easy, however. Isabel Stearns considers the first category to be without doubt 'the most elusive of Peirce's categories' (1952: 196-97). Sandra Rosenthal writes that Firstness 'is usually the most neglected of the categories' (1994: 99). For Christopher Hookway, Firstness is the 'hardest of the three (categories) to focus on clearly, and it prompts some of Peirce's less helpful metaphors' (1985: 106). And John Boler deems Firstness certainly the most murky of the categories, and chiefly for this reason it receives the least attention (1964). These concerns over the intransparency of Firstness must surely render it a worthy candidate for the present study's focus on strange 'logics'.

Firstness as neglected, elusive, and in addition, self-reflexive, self-contained, and self-sufficient, also presents another thorn in the side of those who want clarity and distinction: it is inherently inconsistent. To this we might respond in unison: But of course it's inconsistent; that's why it's Firstness! Nevertheless, Rosenthal tells us that the charge of inconsistency 'is based both on Peirce's diverse characterization of Firstness and on his change in emphasis between earlier and later writings' (2001: 1). Now, I by no means wish to enter into any debate over what Peirce meant by his categories. Rather, I would like to suggest that Firstness, Secondness, and Thirdness are *interdependently, interrelatedly interactive*, and that they flow in and out of one another such that it is virtually impossible to say in precise terms 'Here's Firstness, there we have Secondness, and over there lurks Thirdness'. The implication is that Firstness is epistemologically and methodologically prior to language, Secondness is inherently wrapped up in linguistic categories commensurate with

the best of binary or dualist principles, and Thirdness is chiefly of the nature of language itself, though it also contains the means for subverting linguistic categories or habits of thought insofar as it introduces differences within the generalities that are of its very nature.

6.0 But is this really taking us anywhere?

What does this have to do with SU's Bakhtin-inspired 'critique of dialogical reason'? It has to do with the 'critique of dialogical reason' by way of Bakhtin's 'philosophy of responsible action' that is best revealed through literary language. Literature involves 'dialogic exchange' rather than mere 'sentences' or 'propositions' generated from the 'system of language' (code) according to a set of rules and strategies (SU 147). In other words:

In the movement toward polylogism, literary writing overcomes the monologism of language, its limited [non-Bakhtinian] dialogism. Literary writing is this very tension as it finds expression—for example, in the various forms of reported speech, and in the specific rules of each genre, and in the potential for renewal and responsivity with regard to new expressive exigencies. Literary activity properly begins only after the author has taken his bearings with respect to the event he is describing and placed himself outside his very own utterance, thus achieving the condition of 'extralocalization,' or 'exotopy.' To place oneself on the outside means to maintain a gap or relation of otherness between self and other so as to impede reconstruction of the totality. (SU 148)⁸

Hefty words. 'Extralocalization' or 'exotopy' places the writer—and hopefully, the reader—in an alternate 'timespace' slice within the whole. This by no means is to suggest a God's-eye view, I would expect. Rather, the author has taken her bearings 'with respect to the event' she is in the process of re-creating, thus placing herself 'outside' her own words.

But where is this 'outside', if there is no genuine 'outside', no God's-eye view, no access to the totality? I would suggest that, modelingly and metaphorically speaking, it is within the line of demarcation in Figure 1. There, where there is no there and no when, a slice in timespace is carved out. What was there as a possible candidate for emerging into the light of day and take its place among other signs becoming still other signs. There is both A and Not-A, and at the same time there is the possibility of neither A nor Not-A, but the surfacing of something else, something different and new. If that something different and new manages to gain entry into some consciousness or other, an *abduction* might have happened. But: Novelty gaining entry into the subject's zone of awareness? How can this be? In view of some of my earlier suggestions, by way of the Included-Middles between the Eithers and the Ors, between A and Not-A. By virtue of what might otherwise be considered Contradictions evinced precisely by those Eithers and Ors.

In much this vein, Petrilli and Ponzio argue that Bakhtin's 'polysemy, dialogism, and polylogism reveals the limitations of Hegelian dialectics'. Hegel's system was a 'unilateral, rigid, and fossilized conception of dialogue; thus it can be characterized as pseudo-dialogic and, in the final analysis, pseudo-dialectic'. Bakhtin would have nothing to do with this 'monologic dialectics', for it demands no 'responsibility' on the part of the subject, who always remains *interdependently*, *interrelatedly interactive*, within the semiosic process (*SU* 152—italicized words are mine).

Indeed, Petrilli and Ponzio call for an 'other logic', throughout their multiple allusions to a vague 'logic' of multiple sorts: a 'logic' somehow capable of accounting for the abductive process, a 'logic' of the emergence of novelty out of a space without place within a time without linear temporality. In an effort to tunnel down under SU's discourse, might it be possible to garner some sense of what this 'logic' might entail?

7.0 But how can we dig a tunnel through processual flow?

Tunnel through flow? Impossible. Admittedly, that was a bad metaphor. But, after all, we can hardly talk of analysis, or even of inference as in abductive inference, if we are within the flow. Flow is flow: uncut, unclassified, and inaccessible, conceptually speaking. If we cut it, it is no longer flow.

Nevertheless, Helmut Pape (1999) argues that abduction, in keeping with Peirce's triadomania, can in effect be subdivided into (1) a *theory of plausibility*—once a surprise is registered instead of what one expected to occur—(2) a *logic of discovery*—the possibility for creating new hypotheses—and (3) a *logic of hypothesis preference*—for selecting and justifying the choice of one hypothesis over others. The problem with Peirce, Pape writes, is that he conflates (2) and (3), and indeed, he occasionally merges (3) with (1). Peirce, in other words, fails to make the proper distinctions in his account of the abductive process.

However, once again, process as process doesn't allow for categorization, because when categories are extracted from process, there is no process. Put in another way, if abduction is more of the nature of Firstness than the other categories, if induction is a matter chiefly of Secondness, and if deduction is most properly aligned with Thirdness, should not the process of abduction be deemed inordinately *vague* in the genuine Peircean sense? If so, should we really press for 'proper distinctions', thus disregarding the 'holistic' nature of the abductive process? My inclination would be to say: No. Pape does go on to point out, however, that qualia, as Firsts, are inaccessible to conscious awareness. Consciousness enters only *after* the emergence of qualia, when the subject can be—albeit artificially, in the Cartesian sense—distinguished from the object or sign, and subsequently relations of Secondness and then Thirdness enter the scene. Yet, it is important to bear in mind that qualia form the beginning of the abductive process. There is an image, that, when

registered in consciousness, appears as something other than what was expected. And a surprise ensues. Then the image interrelates in the mind with past images and by mediation of Thirdness, and a possible account for the unexpected occurrence emerges.

7.1 *In the beginning was the image*

The important point is that the process begins with an *image*: not ideas or thoughts, not concepts or meaning, not a lot of verbiage going on, but merely a humble *image*, no more and no less, whether visual, auditory, tactile, olfactory or gustatory. The *image* comes 'like a flash' (*CP*: 5.181). It is there, and it either satisfies expectations or comes as a surprise. If there is a surprise, then a possible reason for the surprise appears as another *image*.

This *image* can be drawn from a vast range of possibilities along the flow of everyday life. Peirce gives this example:

I see an azalea in full bloom. No, no! I do not see that; though that is the only way I can describe what I see. *That* is a proposition, a sentence, a fact; but what I perceive is not proposition, sentence, fact, but only an image, which I make intelligible in part by means of a statement of fact. The statement is abstract; but what I see is concrete. I perform an abduction when I so much as express in a sentence anything I see. (*MS*: 692).

After abduction appropriates an image, the process goes on, as the image is set apart from the imager as something other than the imager's self. Then the image is ab-stracted from other objects in its vicinity, and it is tacitly related to a general class of objects belonging to the same species. Then a word appears as a consequence of the image abducted as a particular type of sign. Then a sentence may be forthcoming; and if necessary, an entire text pours forth specifying the object, the class to which it belongs, and its properties and characteristics.

The sign began with the most concrete of concretes: within *vagueness* and the *overdetermination* of virtually indefinite possibilities for sign development. And it ended in language, *generalities* of the most *general* sense: the *underdetermination* of indefinite possibilities or probabilities for alternative conceptions of the object and class of objects in question. Pape's notion of abduction subdivision, it would appear, bears a further critical look.

7.2 'Logic' you said?

Abduction as vague, conjectural, tentative, merely a 'might be'? Can we really speak, then, of 'abductive reasoning'? Of 'abductive inference'? Of a 'logic of abduction' or 'discovery'? Peirce responds in the affirmative. He tells us that pragmatism 'is nothing else than the question of the logic of abduction' (*CP*: 5.196). Even though an abduction is an 'act of insight' that suddenly appears from somewhere (*CP*: 5.181), even though it is creative, of aesthetic nature, emerging through contemplation, daydreaming, and what he calls 'musement' (*CP*: 6.458), and even though it is 'nothing but a 'guessing instinct' (*CP*: 5.600), nevertheless, it is 'logical'. It consists of a 'logic' of *vagueness*, or of *abduction*. As such, it is both inferential and insightful, both reasoning and creative, both rigorous and a free flight of the imagination (Anderson 1986, Frankfurt 1958).

What kind of 'logic' can this be? If it is any kind of 'logic' at all, by Peirce's own admission it is at one and the same time both 'logical' in the classical binary sense and 'psychological' (*CP*: 2.107). The riddle of 'abductive logic' must include classical binary logic as well as *vagueness* and *inconsistency* (abrogation of the Principle of Non-Contradiction) and *generality* and *incompleteness* (abrogation of the Excluded-Middle Principle). Given the nature of *vagueness*, both one possibility and the other can be equally acceptable, within different timespace conditions (e.g. in one cultural setting, the center of the universe can be none other than the Earth; in another cultural setting, the Sun

is the only possible candidate). Given the nature of *generality*, neither one contextualized assertion nor another one is necessarily acceptable, for there may be at minimum a third possibility (e.g. today's wisdom has it that it that neither the Earth nor the Sun is the center of the universe, for the answer lies elsewhere). Abductive inference by means of abductive 'logic' takes in 'alogical' principles from the viewpoint of classical logic, and it allows for the possibility of *inconsistency* and *vagueness* and *incompleteness* and *generality* as well (Hoffmann 1999). In other words, abduction, induction and deduction never stand alone. Rather, they are in a perpetual liquid embrace along the flowing stream of *semiosis* (Merrell 2002, Nesher 2001). Any and all distinctions we wish to force on this process mutilate and ultimately kill it.

SU often stresses that 'interlingualism', 'intertextuality', and 'interculturalism' inherent in Bakhtin's dialogic perspective is of utmost importance. The point is well taken. However, I would venture to say that the prefixes on their own drift down toward the notions, mentioned above, of interdependency, interaction, and interrelatedness. All possibilities as Firstness are interdependent; all happenings or

Secondness are interactive, and when entering into processes of Thirdness they are $0 \rightarrow \varnothing \rightarrow \cdot \rightarrow \left(\begin{array}{c} \\ \\ \\ \\ \end{array} \right)$

intricately *interrelated*. But in order to develop this theme as a backdrop to SU's disquisition on semiosis, please allow me a digression.

8.0 **Flowing into the question**

24

If I'm to use metaphorical allusions I might as well take them to their extreme form. So, consider Figure 2 (place about here). We have the process of becoming, from zero or 'emptiness' to the 'empty set' to an infinitesimal point to a line to its division and finally to a tripodic form. Let's first focus on the vertical line. It is a line of demarcation, as in Figure 1. Then it separates itself; it is cut, mutilated, by its demarcator, to product three segments, that nevertheless remain interdependent, interrelated, and interactive, by virtue of the two-way arrows.

This is the initiation—digitalized, for, after all, how else can I describe the process in language?—of the becoming of a sign of abduction. Then the tripodic figure comes into play. It encapsulates the entire process: from 'emptiness' or zero, comes the 'empty set', and from there to the quivering, oscillating, scintillating $\sqrt{\bullet}$. This sign is counterpart to the imaginary number, $\sqrt{-1}$, the answer for which is neither +1 nor -1, but something else, that might possible emerge within the context of all signs present—comparable to the imaginary number's use in mathematical proofs.

Look at '+' as *positive possibility*. It is the possibility of many signs that might emerge at a given moment. Look at '-' as *negative possibility*. It is what has been selected at a given moment, which implies what the vast majority of those *positive possibilities are not*. And look at '\P' as *mediating possibility*. It mediates between '+' and '-', and between itself and them. This serves to keep open the possibility of other *possible possibilities* being selected at some other time and place—we are reminded of the possibility of alternate *semiotic objects* and *interpretants* for whatever signs that might fall within our purview. Thus, 'psi', or '\P', is at its roots of the nature of symbolicity.

The interconnectivity between +, -, and \P', may be at its roots *arbitrary*, though by community consent it has becomes *conventional* and now *necessary*. ¹¹

But what is the function of '0' and '\inner{\mathcal{O}}', and for that matter '+' and '-'? Is all this nothing more than a geometry lesson? Or does it have to do with signs and their meaning, and more concretely, with our knowing? Actually, Figure 2 is not as abstract as it appears. It bears on our concrete mental and physical acts during our everyday living. In the first place, the concept of zero is not originally Western. It comes from Hindu thought. In Western mathematics, zero is commonly construed as 'nothing' (Dantzig 1930). But it does not merely imply something that is nothing, or *empty*. 'Emptiness', or *Sunya* as the word is used in Mahayana Buddhism, is in a paradoxical manner of speaking absolutely empty of all emptiness. Even to say 'emptiness is emptiness' is to say 'something', which is not what 'emptiness' is, for to say what 'emptiness' is, is to say what it is not. 'Emptiness' is not simply 'emptiness' as we ordinarily use the term in English—or any other language for that matter. In the second place, zero is not itself a number. It has neither positivity nor negativity. It just is. At the same time, it is the source, the fountainhead, of all the numbers. Strange as it might seem, this is comparable to what we hear from the Tao: from zero or emptiness, one emerges; one subdivides to create two; two becomes three; and from three, many (Huntington 1989, Lao Tsu 1963, merrell 2002, 2003).

8.1 *Emerging becoming*

So, a sign emerges from 'emptiness', 'no-thingness', or 'openness'. The sign emerging is process. It is like going from zero, '0', to the *empty set*, ' \emptyset '. Zero is just zero, or 'pure emptiness'. It is emptied of everything, including even the mere memory of numbers. The empty set, in contrast, is just that: *something* that happens to be *empty*. It is the *noticed absence* of *something* that was or could have been or might possibly be there partially or wholly to fill the unoccupied space (Seife 2000).

We have *pure emptiness* ('0'), the 'noticed absence' of *somethingness* (' \emptyset '), and the *pluses* and the *minuses*. Then the emerging sign begins entering into the range of our anticipations and expectations and hopes and desires and fears. We begin experiencing the sign as 'some-*thing*' that might bring on pleasantness or unpleasantness, depending upon the sign maker or taker and the context. But now the emerging sign is a far cry from mere 'emptiness'. It is now possibly in the process of emerging into some consciousness, though the abductive process has hardly begun, for the sign is as yet no more than a possible sign.

What has been left out of the picture thus far is a foreshadowing of the sign's possible abduction or interpretant—and now we veer toward SU's Peircean inclinations. We have *positivity*, precursor to some icon or representamen, and negativity, precursor to some index or semiotic object. But there is no precursor to some *symbol* or *interpretant*. This Thirdness, depicted by ' Ψ ', of a signs becoming, is where we begin becoming our signs and they begin becoming us, where we enjoy no privilege over our signs nor do they take precedence over us. We are precursors that bring about the emergence of our signs in the genuine sense; our signs are precursors without which we would remain stuck in a bed of quicksand.

Suddenly the central portion of Figure 2, ' $\sqrt{\bullet}$ ', is crying out for a moment in the spotlight. This strange symbol is tantamount to the square root of minus one. The mathematical sign, ' $\sqrt{-1}$ ', was an embarrassment for various centuries, given the impossibility of its solution. So it was conveniently stashed away in the closet. Finally, when it could be ignored no longer, it was brought out for use in certain branches of mathematics. But the uncomfortable anomaly remained. It had no solution, and it apparently enjoyed no comparison with anything in the physical world. Eventually the sign, 'i', was used in its place. Like zero, and ' Ψ ', 'i' has no 'value', either positive or negative.

It just *is* what it *is*. This was more to the liking of the mathematics community. They could use the sign as if it contained no cantankerous ambiguity, and go on with their work. In due course, '*i*' found its way into equations in relativity and quantum theory, and in certain engineering and computer problems (Seife 2000).

This is astounding! The square root of minus one has no direct re-presentation in the physical world; yet, embedded within mathematical equations, it is capable indirectly of accounting for the nature of that selfsame physical world. It embodies what *is* and what *is not* or neither what *is* nor what *is not* without any possibility of deciding which should be foregrounded and which backgrounded. Could it be that our physical world is mocking us? Is the world, including us, caught up in undecidability? If so, can we be certain of no more than our own uncertainty? Can our knowing be anything more than unknowing?

8.2 The digression becomes self-perpetuating

However enigmatic ' $\sqrt{-1}$ ' and ' $\sqrt{\bullet}$ ' may be, they make up the eye of the semiosic swirl. We see this in Figure 2, where there is oscillation between two contradictory values, '+' and '-'. What is the answer to the square root of minus one? Is it -1? No. Is it +1? No. Yet, paradoxically, it is *both*, and it is *neither*. Can we not say the same of ' $\sqrt{\bullet}$ ' and positivity and negativity? By a comparable token, the role of the interpretant, as mediator and moderator and media minimizing agent, is, in and of its own accord, *neither* positive *nor* negative and at the same time *both* positive *and* negative. In this manner, if ' $\sqrt{-1}$ ' is indirectly interrelated with the physical world, so also, as illustrated in Figure 2, ' $\sqrt{\bullet}$ ' is interrelated with the semiosic world.

Now how can there be such 'illogic' if interpretants, meaning, and interpretation always entail slapping some sort of prioritized, privileged, hierarchized, prejudicial, discriminatory value on any and all signs by way of logical justification and rational legitimation? Do we have no recourse but to admit that, in spite of our wish for logical cogency and rational aplomb, we invariably fall into inconsistencies at one step or another in the long walk of our everyday affairs? Is that what makes us human, perhaps all too human? *SU* hardly touches on this problem, which might be expected. In spite of *SU*'s silence in this regard, whatever *being* 'human' might entail, perhaps we should try to forget *being*, and strive to enter the *process of becoming*. If we could do so, nothing would have any self-seeking, self-indulgent, ego-centered value. Every-thing would resonate as sheer *possibility in the process of becoming*, without any-thing having (yet) actually become.

9.0 What, really, has this to do with SU's 'other logic'?

Ah, yes, the 'other logic'. Is that not what SU implicitly calls for? So is SU not once again vindicated? But what of SU's notion of a 'logic' of abduction? Abduction as vague, conjectural, tentative, merely a possibility, a 'might be'? Like the Figure 2 process? Can we really speak of 'abductive reasoning'? Of 'abductive inference'? Of a 'logic of abduction' or 'discovery'? Peirce, and SU, I must reiterate, respond in the affirmative.

What, then, are the implications of these assumptions? If I may be allowed a healthy dose of conjecturing, the implications take us back to the initial observations of this essay. At the beginning of the twenty first century the Newtonian-Cartesian mechanistic worldview is slowly giving way to a non-mechanical world of process, impermanence, emergence. The *fin de siécle* mood has spilled into a different attitude toward the mind, body, others, and the world. How could we have with such confidence separated body and mind, *bodymind* and the Other, *bodymindotherness* and world? How can we once again enter into a dialogue with nature? How can we enter into 're-enchantment of the world'? How can we become participants rather than presumed spectators? After all, feeling, integrated feeling, precedes sensation, experience, and thought.

Abduction, accompanying vague feelings, like daydreaming and musing, emerges not from the imperious, detached conscious mind, but from *bodymind interdependently interrelated* and in *interaction* with others and with the world, as in Figure 2 conceived in the form of a diagrammatic metaphor. Beginning with Figure 2's *participatory* approach to becoming, as it is attuned to our abductive faculties at the *bodymind* level, perhaps we can take a step in the right direction. Perhaps.

9.1 *Yet another aside: signs of their times*

30

Abduction, Firstness, vagueness, multiple possible interpretations variously actualized, etc.

Does this not lead us toward that euphorically applauded, multiply construed, and occasionally denigrated or otherwise rejected term, 'postmodernism'?

The postmodern move often takes Nietzsche's definition of truth as 'the sum total of interpretations' and hence there are occasional attempts to see that Gestalt image—the duck and the rabbit—held in a single intuition. The postmodernist appears before us as a rationalist in irrational times, a Don Quixote who hangs onto ideals long past their time, a Hamlet whose oscillation between possibilities eventually ends in his demise. In order to understand, to truly know the way of things in an age of multiple meanings, we would ordinarily take it that the senses of terms are not 'arrived at' in the sense of weaning and honing them until univocity is achieved. However, in postmodern times there is an absence of univocity and linearity. Postmodernists recognize the principal terms defining our cultural past as vague, whose meanings can't be determined by logical or semantic analysis but by aesthetic juxtaposition and contrast, or by 'abductive inference', so to speak. Jacques Derrida's deconstructive wordplay is but one of a number of illustrations of this posture—or posturelessness, if you will.

Then should we not resist any and all gentle nudges toward the postmodern turn? Are not these implications of 'antifoundationalism', of the 'crisis of representation', of 'referential indeterminacy', and of 'meaning pluralism', repugnant to semiotic moderation and mediation? Well, yes, to a certain extent. But 'to a certain extent' is a tenuous notion, to say the least. Perhaps a return directly to *SU* might be helpful regarding the problem at hand.

10.0 The modern/postmodern rage over pros and cons of reference

But I immediately abjure. For, I find *SU*'s use of the term 'referent' and 'reference' somewhat troubling, especially since it takes its cue chiefly from Charles Morris, and to an extent the medieval scholar Peter of Spain (*SU* 17-18). According to *SU*'s rendition, a sign always has a referent, or *designatum*; what exists insofar as it is the object of a sign's referent is the *denotatum*. 'Unicorn' is a sign with a referent, albeit within a myth-world, so the sign enjoys a *designatum*. The imaginary beast exists, within the mythical text at least, so it is the *denotatum* of the sign. For a believer, 'God' has both *designatum* and *denotatum*, but for the non-believe 'God' has no more than a *designatum*.

What is lost in *SU*'s referential talk is the rich debate surrounding *denotation* and *reference*, in particular, regarding Alexis Meinong's impossible yet 'subsistent', though not 'existent', 'mental objects'. In 'On Denoting', Bertrand Russell (1905) suggests we should dispense with Meinong's unwanted guests, and Willard Van Orman Quine (1969) alludes to Meinong's explosive population of 'objects' as an unruly jungle. Such criticism would deter the Meinongian nary a whit, however. Instead of Russell's 'Whatever is "referred" to must exist, for if not, it is not an object,' the Meinongian would place stock in 'Whatever is "referred" to must be an "object" by the very fact that it is that to which reference is made'. Russell penned virulent protests against this sort of thinking. He assured us that if we take Meinong's idea that every thought has an object at face value, it inevitably ends in contradiction. If we construe a 'golden mountain' as 'an object which is such that it is golden and also such that it is not the case that it is golden', according to Russell's 'theory of descriptions', we have an intolerable condition: a 'golden mountain' can neither exist nor can it enjoy 'reference' of any form or fashion.

However, according to some observers, 'reference' doesn't have to be 'true', as Russell would have it, or even accurate, in the sense of Keith Donnelan (1966) or Leonard Linsky (1971). A

speaker can use 'reference' even if (1) it does not fit the 'referent' (because it is false) or if (2) the presupposition of existence is not satisfied (see Lewis 1987, also Whiteside 1987). In either case, there is not really any need for the concept of 'reference', for in the final analysis, there are only *interrelations*, and *interrelations* of *interrelations*, within the virtually democratic *semiosic* gush.

10.1 On semiosic interconnectedness as a whole

In other words, in view of *SU*'s resistance to the notion of autonomous, individual signs and their human—and nonhuman as well—makers and takers, it is reasonable to suggest that sign representamens, objects, interpretants, and interpreter-interpretants, are all (1) *interdependent* insofar as they are possibilities of Firstness, (2) *interactive* insofar as they are actual signs among signs, and (3) *interrelated* insofar as they are perpetually becoming something other than what they were becoming.

This must be the case, for within the Peircean semiosic process, there can be no *absolutely absolute distinction* between *existents* ('real' objects, acts, and events) and *non-existents* (mere 'mental objects' as possible imaginary constructs, hallucinations, or fictions). In Captain Nemo's time there were no nuclear-powered submarines; during the days of Rembrandt a Duchamp urinal as a work of art would have been, we must suppose, virtually inconceivable; during the heyday of classical physics, the idea of curved space would have been looked upon as a hoax. And so on. In this respect, Peircean semiotics indeed makes some moves, hovering tenderly, tenuously and tentatively, toward Alexis Meinong's jungle of imaginary or mental 'objects', if we place any and all signs within the sphere of all possible timespace slices, past, present, and future (merrell 1997, 2003).

What I am implying in so many words is that Morris's concept of the sign remained lodged in logical positivism (philosophy), behaviorism (psychology), and physicalism (the natural sciences).

To an extent, philosophy and psychology, and especially physics, have given up this Cartesian-Newtonian corpuscular-kinetic view, and I would suggest that it's high time semiotic theory followed suit. Recall, for example, when philosophy was given a post-positivist and post-analytic wake-up call with the appearance of Quine's article 'Two Dogmas of Empiricism' (1953). The 'two dogmas' are, first, the idea that there is a clear-cut distinction between *analytic* and *synthetic* statements—the truth of the first sort is inherent in the meanings of the words along, the truth of the second requires an appraisal of that to which the words refer, and, second, *reductionism*—the idea that theories of the world can be reduced to observation sentences and theoretical sentences, with rules of connection between them.

Quine argued that there is no fool-proof way of distinguishing between analytic and synthetic statements. What is analytic for one community—'The Earth is the center of the universe'—became synthetically falsified by certain members of another community, and within the same community, what is taken as analytical for on speaker might be up for grabs in terms of its truth value for another speaker—'Bachelors are unmarried men' ('But what about seals without mates, also called "bachelors"'?). Quine takes reductionism to task by demonstrating the fallacy of assuming every statement of one language can be translated into equivalent statements of another language. Reduction assumes each sentence of a language in isolation can be confirmed or disconfirmed through a one-to-one correspondence to another sentence of the same language or of another language, or through a one-to-one correspondence with the sentence's object of reference. The upshot of Quine's work regarding the 'two dogmas of empiricism' is an inextricable 'inscrutability of reference' and an equally inextricable 'indeterminacy of translation'.

The fallacy of the analytic/synthetic distinction and reductionionism, when opened to view as far as Quine was concerned, also opened up a can of worms. Sentences simply cannot stand straight

and tall as stalwart representors of other sentences or of the world. All sentences within a language make up an intricate web, the web of language, which entails an equally intricate web of belief. This, then, is Quine's rendition of what I have termed the *interdependent*, *interrelated interaction* of all sign wherever and whenever. If Peircean signs are always becoming other signs, and if the process is in principle ongoing, with no conceivable end—as *SU* repeats time and again—then the same goes for the sphere of *semiosis*. ¹³

10.2 Still, SU resists the resistance to reference

Yes, SU embraces reference, but to SU's credit, not in wholesale fashion. This we can note especially when the authors come down hard on Eco's resistance to reference. To wit:

Arguments in favour of non-referential semantics can only be based on a reifying and reductive approach to the referent.... Eco has reason to reject this idea of the referent; however, his argument is highly questionable when used as the basis for concluding that semantics must deal with the relation between one sign and another, between signifiers and signifieds, between signifiers and interpretants, without abandoning the chain of reciprocal sign reference that generates a process of unlimited semiosis. (315)

In Eco's rejection of the referent, we read, he strives to liberate semiotics from what he calls a 'metaphysics of the referent'.

But he does so by resorting to the very metaphysics he purports to reject. It is metaphysical in the sense that it holds to 'signification semiotics'. This is semiotics of two-way sign-meaning relations that, unlike semiology's rejection of the physical world of objects, acts, and events with which signs are interrelated, posits reference for sure, but this reference is much as if it were an after thought. Such diminutions of reference, Eco goes on, isn't really necessary, for we can get along fine

by assuming the meaning of the sign can be taken as referent and meaning wrapped up into one compact package. The problem is that the three-way sign is thus conflated into a binary sign, with the referent simply standing in as a relatively unnecessary and somewhat opaque proxy. SU continues:

Eco's reasoning is based on unacceptable presuppositions, which can be summarized roughly as follows: the referent can be considered either as a single, concrete entity or as an abstract entity—in which case it identifies with meaning so that what the sign denotes is meaning. This leads to a confusion of two different functions, both of which are present (along with others) in the process of semiosis: that of being expressed (meaning) by a signifier, and that of being denoted by a sign (referent). In simpler albeit more imprecise terms, two distinct functions of the sign are reductively identified: expressing and denoting. (318).

Thus semiology of the Saussure variety, or 'signification semiotics' in SU's terminology, has no use for the referent, that is, for the Peircean 'semiotic object'. In much the same manner, Eco also largely ignores reference, according to SU. So it would appear that SU is on course in this regard. There is a 'semiotic object', and it must be taken into account; otherwise any sign concept is seriously lacking. But indeterminacy of translation due to the problems of two-way reference between the sign and its object, if accepted—and I would by and large accept the idea—takes the 'semiotic object' as in the long run vague, uncertain, and transient over time. SU maintains a healthy dose of triadicity, after all.

11.0 Meandering toward the landing

In sum, the 'semiotic object' as 'semiotically real' can approach the 'veridically real' regarding the physical world. But it can never actually reach that which is 'truly real' of the object. This is not to say that the 'truly real' is equivalent to Kantian *ding an sich*. The 'semiotically real' can approach the 'veridically real' in the 'long run'. But what is the 'long run'? Peirce tells us that it is at the infinite stretch, accessible solely to an immortal individual or to an infinite community of individual knowers. So as far as our finitude goes, the 'veridically real' is out of reach. This attests to the vague, uncertain, and transient nature of the 'semiotic object'.

Hence, taking changes flowing through history into view, there are many diverse, converging and diverging, congenial and antagonistic, interpretations to every problem situation, wherever and whenever. And above all, any and all interpretations: (1) may evoke grandiose illusions of *completeness*, but they will eventually begin revealing some tinge of *inconsistency*, or (2) they may evoke equally grandiose dreams of *consistency*, but their *incompleteness* will sooner or later begin surfacing, or (3) in the worst possible scenario, they may turn out to be both *incomplete* and *inconsistent*. *SU*, perhaps unwittingly, suggests this selfsame conclusion. Which is to say that the Semiosic Sphere's Center Everywhere and its Circumference Nowhere. Which is to say that wherever and whenever we go, here we are, now, among *signs becoming signs*.

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⁵ The authors of *SU* pays some lip service to Peirce's pair of concepts, *vagueness* and *generality* (473-75), but in my estimation they should much further, since the terms have a central place in Peirce's overall concept of the sign, and above all since the *complementarity* between them is germane to the very idea of signs always *becoming something other that what they were becoming*.

40

¹ With respect to this topic, *SU* offers a particularly biting critique of Umberto Eco's interpretation of the sign on the grounds that it still has a foot lodged in the doorway of the semiological signifier/signified dichotomy (318-27).

² I should mention at this juncture that Petrilli and Ponzio dedicate an entire chapter to the work of Lady Welby, Bakhtin, Morris, Sebeok, Ferruccio Rossi-Landi and Umberto Eco, I will not address their embracing or rejecting the multiple aspects of these authors' interpretation of semiotics. However, I must point out that I find their favorable nod toward Marxist semioticist Rossi-Landi's use of a 'homological' model and his adoption of 'coding' in much the sense of information theory puzzling (248-51, 259-60). The very idea of 'homological' modeling is binary and structuralist in orientation, and the project of grounding semiotics in 'coding' almost invariably tends to fix signs and their interpretations, which is a far cry from Peirce's processual philosophy. To Petrilli and Ponzio's credit, however, they do critique the lingering sense of sign stability and invariance in Rossi-Landi and other interpretations (282-86), and they further support their view in their discussion of 'open' versus 'closed' communities (527-32)

³ This process, as I take it, is along the lines of Putnam on meaning as briefly described above.

⁴ See also a critique of Weber's 'paradox of rationality' in Bernstein (1992).

⁶ Moreover, Morris's ideal of biology, regarding which *SU* seems uncritically favorably disposed toward, is outmoded, which is understandable, but his division of the whole of semiotics into *syntax*, *semantics* and *pragmatics* purportedly to

offer a grand totalizing vision of signs is hopelessly limited to the anthropocentric logical positivist doctrine (178-81, 192, 198-201).

The Ψ function, in fact, does not represent something which would have its place in a point of space at a given instant; it represents, taken in its entirety, the state of knowledge of an observer, at the instant considered, of the physical reality that he studies; there is nothing surprising, therefore, in the fact that the function varies from one observer to another. (Broglie 1955: 131)

If we replace de Broglie's 'state of knowledge' with 'knowing process', 'observer' with 'knower', and 'physical reality' with 'object of knowing', I would suggest that his words fit nicely within the context of this essay.

¹³ Donald Davidson (1984) proposed a third dogma of empiricism, the dichotomy form/content, in addition to Quine's two dogmas. Form/content is comparable to sign/meaning, or signifier/signified, thus evoking the limitations of bivalent semiology. But that is another story for another time.

⁷ The italicized terms, *overdetermination* and *underdetermination* and their interrelations with Peirce's terms, *vagueness* and *generality*, are of my own making (for further, see merrell 2002, 2004, 2005).

⁸ Actually, I would suggest that Petrilli and Ponzio might well have reconsidered their conception of 'rules' in light of Peirce's 'pragmatic maxim', which liberally allows for rule following and rule fudging and rule breaking, much in the sense of Wittgenstein, as I have attempted to illustrate elsewhere (merrell 2003).

⁹ While *SU* has high regard for the notion of 'musement' (46, 59, 213, 219, 223) in regard to 'abduction', 25-27, 337-38), Petrilli and Ponzio might have taken Peirce's 'pragmatic maxim' into consideration with respect to the *interdependent*, *interrelated interaction* between the individual muser and her/his abducted signs and the community within which s/he makes and takes her/his signs.

¹⁰ For further on *incompleteness* and *inconsistency*, see the references in note 7.

¹¹ For diverse sources that have led me to this discussion surrounding Figure 2, in Peirce studies see Boler 1964, Fisch 1986, Hartshorne 1952, Rosenthal 1994, 2000, Weiss 1952, in mathematics and logic, Kauffman and Varela 1980, Kaku, 1994, Kline 1980, Kneale and Kneale, 1980, Rotman 1987, 1993, 2000.

¹² It bears mentioning at this juncture that the symbol, 'Ψ' is used in Erwin Schrödinger's 'quantum wave function'. According to physicist Louis de Broglie: