Resemblance:
From a complementarity point of view?

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Abstract. Three premises set the stage for a Peirce based notion of *resemblance*, which, as Firstness, cannot be more than vaguely distinguished from Secondness and Thirdness. Inclusion of Firstness with, and within, Secondness and Thirdness, calls for a nonbivalent, nonlinear, context dependent mode of thinking characteristic of *semiosis* — that is, the process by which everything is always becoming something other than what it was becoming — and at the same time it includes linear, bivalent classical logic as a subset. Certain aspects of the *Dao*, Buddhist philosophy, and Donald Davidson's 'radical interpretation' afford additional, and perhaps unexpected, support for the initial set of three premises.

1. Paradigm and syntagm

Premise 1: Resemblance involves what we feel, sense, experience, recognize, and acknowledge in something that entails the possibility for its interacting with something else.

I begin with a few words on Roman Jakobson, and then I go on to suggest some limitations inherent in the 'structuralist' framework.

According to Jakobson, a sentence is formed by selecting words and combining them in terms of paradigmatic association and linear syntagmatic arrangement. 'He' or 'They', and 'spoke' or 'listened', enjoy paradigmatic association. 'He spoke' and 'They listened' are organized syntagmatically. We have in our heads, so the story goes, a set of paradigmatic associations from which we choose particular lexical items, and we put the product of our choice together in syntagmatic strings according to syntactic rules (Jakobson 1971, see also Saussure 1966). Thus the set of possible interactions in Table 1.

Table 1. Bivalent interrelations.

	A	B	
	A	**B**	
1	**Day**	**Night**	
2	**White**	**Black**	
3	**Knowledge**	**Ignorance**	**Paradigm**
4	**Good**	**Evil**	
Syntagm			

Using these paradigm/syntagm combinations in the order of Claude Lévi-Strauss's (1963) 'homologies', we can infer from the terms in Table 1 that: Day : Night :: White : Black :: Knowledge : Ignorance :: Good : Evil. Alternately, with respect to metaphorical/ metonymical relations, we could have 'King' as the powerful force within the 'Empire' linked through metonymical relations, and 'Lion' and 'Jungle' linked to 'King' and 'Empire' through metaphorical-metonymical relations, and we have another Lévi-Strauss homology: King : Lion :: Empire : Jungle. There is metaphorical resemblance between King and Lion and Empire and Jungle on the basis of metonymical relations between King and Empire and Lion and Jungle.

There is also a problem, as sinologist A. C. Graham (1992: 59–83) points out, given the inclination in the West to take paradigmatic terms as if they were nothing more than binary oppositions. According to binarism, Day and Night, White and Black, Knowledge and Ignorance, and Good and Evil, are pairs of terms in conflict. Since each term is what it is, and immutably so in an ideal world, any choice between the individual terms in a pair must be either between the one or the other, for, binarily speaking, there can be no possible 'third term'. Thus the classical bivalent, logical *Principles* of *Identity*, *Non-Contradiction* and *Excluded-Middle*.[1]

However, such chains of opposition have been up for question during roughly a half century, especially after Jacques Derrida (1976) notoriously argued that Western pairs of terms in conflict, given our 'logocentric' bias, prioritize one end of an opposition over the other: signified over signifier, reality over appearance, culture over nature, men over women, whites over others, good over evil, knowledge over ignorance, and so on, as if the prioritized terms had no intrinsic need of their counterparts.

This often presupposes that the signified can make its own way among other signifieds, as if it were autonomous of its respective signifier; that reality is objective, and has no need of subjective appearances; that culture is autonomous of, and need not feed from, nature; that people of 'color' are no more than a burden for 'whites'; that if we could all know the good precisely for what it is, evil would be no more; that women are necessary for procreation and certain marital duties, but other than that it's a man's world; that if we could just reason infallibly, all our irreason would dissolve and all our problems would eventually be solved; and other such biased and absurd propositions.

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[1] In a nutshell, these Principles can be articulated as: Identity (A = A), Non-Contradiction (not both A and Not-A), and Excluded-Middle (either A or Not-A; that is, either A or some alternative).

This notion of linear, bivalent chains of opposition governed by paradigms, if extrapolated to the extreme, could be construed as entire *world images*, or scientific theories as it were, that are incommensurable, incomparable, and virtually untranslatable, with virtually no lines of resemblance between them, for they are as alien to one another as apples and aardvarks. This is, of course, the holistic 'incommensurability thesis' that became the rage following Thomas Kuhn's *Structure of Scientific Revolutions* (1970). As the incommensurabilist story goes, Newtonian physics, based on Euclidean geometry and separation of space and time, is a far cry, and well-nigh inconceivable, from within the frame of reference of Einsteinian physics, which is predicated on Riemannian geometry and timespace union. Thus the meaning of terms the likes of 'space', 'time', 'momentum', 'energy', and 'matter', bear no translatability or comparability, much less similarity or resemblance, from exclusively within the Newtonian and the Einsteinian perspectives respectively (see also Feyerabend 1975).

However, as this essay unfolds, we shall note that everything is 'multivalently' and 'nonlinearly' *interdependently interrelated* to, and *interactive with*, everything else, which is to say that nothing is absolutely incommensurable or incompatible with anything else, but rather, *complementarity* is the watchword.[2] And with *complementarity* in mind, *mediation* comes into the picture by means of which there is always the possibility of something else, some 'third sign', that might emerge from between the two poles of a bivalent pair of conflicting signs.

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[2]   I use the italicized terms "interdependent", "interactive", and "interrelated", though they are not exactly Peircean in origin. Nevertheless, as I have argued in detail elsewhere, citing derivation of these terms in Buddhist philosophy and quantum theory, I believe they effectively portray the spirit of Peirce regarding his general concept of *semiosis* (for further in this regard, see merrell 2000, 2002, 2003, 2010).

Table 2. Complementary interrelations.

	Yin	Yang	
1	Night	Day	
2	Darkness	Light	'Paradigm'
3	Knowledge	Ignorance	
4	Female	Male	
	'Syntagm'		

2. Complementarity

Premise 2: Resemblance emerges out of something that is interdependently, interrelatedly interactive with something else when some sense of that something else is included within the something, and vice versa.

The Dao, Buddhism, and certain other strains of Asian philosophy, as well as some branches of Western thought, namely, process philosophy as characterized mainly by Charles S. Peirce, William James, John Dewey, and Alfred North Whitehead, take their leave of bivalent thinking.

Non-bivalent processual thinking entails that, first, what there *is*, is always becoming something other than what it *was* becoming; hence it enjoys no relatively fixed *Identity Principle* stipulating that what *is*, is what it *is*, yesterday, today and into the receding future. Second, there is no need to shrink in horror when *Contradictions* pop up; in fact, thinking can continue to flow along within the process of becoming in spite of apparent *Contradictions*, which are often a boon rather than a bane for creating new ideas; hence the *Principle of Non-Contradiction* doesn't always hold. Third, available options, alternatives, or 'third signs', do not simply involve a set of two way streets such that you're either coming or going, either right or wrong, either one of 'us' or one of 'them'; in other words, any fork in the road is more than merely

bivalent (an either/or affair); it is tri-, and multivalent; that is to say, the intransigent *Excluded-Middle Principle* loses its iron-clad grip.

In sum, *Identity* is a fluid transient affair; both horns of a *Contradiction* often can and advisably should be entertained, for they might lead to keener insight on a problem situation; and rather than the sacrosanct *Excluded-Middle Principle*, *Included-Middles* ('third signs') should often be embraced in order to allow the emergence of something new out of conflicting concepts, for otherwise, an un-wanted stalemate would likely ensue (in general, see Peirce CP 6.164–184, 6.185–238, 6.318–394, also Odin 1996; Priest 2004).

In this light, consider Table 2. Notice that the familiar pair of *Dao* terms has entered the equation: *Yin-Yang*. Notice also that these terms are not merely incompatible, for within the one there is a little bit of the other, and vice versa (as in ☯). I will henceforth label this mingling of the one within the other the '*area of possible* (*convergent*, *coalescent*) *resemblance*'. In other words, Yin and Yang are *comple-mentary*.[3] This is to say that there can be no Yin without Yang and no Yang without Yin (see also Kothari 1985; Mansfield 1989).

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3   I should very briefly qualify the meaning of *complementarity* as the word is used in this essay. I would like to think that, as physicist Niels Bohr (1934: 39) put it, we are not dealing with *contradictory* but *complementary* images and ideas, and *complementarity* 'is a term suited to embrace the features of individuality [within a local context] of quantum phenomena [within the global context]'. Physicist John Bell (1989: 363) tells us that Bohr doesn't use 'complementary' in the customary sense according to which an elephant, from the front is 'head, trunk, and two legs', from the back is 'bottom, tail, and two legs', and from the sides is 'otherwise' and from top and bottom 'different again'. These views 'supplement one another, and they are all entailed by the unifying concept "elephant"'. Bohr, in contrast, makes a distinction between the object as seen from *local* and relatively limited per-spectives and the object as seen from an *encompassing* view. Bohr's comple-mentarity, then, has to do with interrelations between a *global* view, on the one hand, and diverse *local* views, on the other (Havas 1993). For example, the 'rabbit/duck' drawing, made notorious by Wittgenstein, is either a 'rabbit' or a 'duck' from two distinct and mutually exclusive local views, but from the global

This is to say that within Yin-Yang, there is no *either/or* categorical distinction between light and day, black and white, good and evil, knowledge and ignorance, male and female, and so on. It's the vagueness of Yin-Yang's mutually interpenetrating and merging form; it's the inbetweenness, which gives rise to the emergence of something spontaneous, different, new. Thus, here also, there is no fixed *Identity*, no categorical *Contradiction* barring, and no immovable *Excluded-Middle*. Rather, depending on the way of taking them, there is either *both* Yin *and* Yang — in which case we have a continuum without any mutilating cuts between them — or there is *neither* exclusively Yin *nor* Yang — in which case they are *contradictorily complementarily converging* and *coalescing* in order to create something new and keep the process alive (Hall, Ames 2001; Gangadean 1981; Loy 1988; also merrell 2007, 2009).

In other words, Yin and Yang are by no means crisp, clear and distinct forms or terms: they are by their very nature *vague*, a *vagueness* that endows them with their fountainhead of creativity. And as catch-all terms or forms in the order of *generalities* of the most *general* sort, they are nonetheless not exempt from some tinge of *ambiguity* or *vagueness*, which renders them plastic, pliable, polymorphous, processual. This interplay of *vagueness* and *generality*, I must hasten to add, is Peircean through and through (CP 5.438–63; Chiasson 2002; Engel-Tiercelin 1992; merrell 1997, 2007; Nadin 1983; Putnam 1983).

Moreover, in somewhat a Peircean sense, the residue of Yang within Yin and Yin within Yang can allow for comparability between them, and by implication, among any and all objects, acts, and happenings — signs all! Likewise, there is some area of similarity and resemblance between anything and anything else — everything is

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view it is 'rabbit-duck'; that is, it is *both* rabbit *and* duck and it is *neither* rabbit *nor* duck, according to the way of the image's taking (for further see Murdoch 1987; Plotnitsky 1994).

similar to everything else in some respect (CP 5.288–289, see also Goodman 1976). In other words, in our less-than-perfect world, and given our human fallibility, there is no darkness so total that there are nary a few photons of light hanging around, no knowledge so complete that it will stand for all time, no logic so iron-clad that it can avoid any and all inconsistencies, no good so absolute that there can be no evil, no creative endeavor so universally accepted that it will suffer no possible criticism, no male absolutely free of any tinge of 'femaleness' in his genes.

As we shall note in more detail below, all *generalities* have some degree of *vagueness* included within them, and all *vagueness*, to be effectively conceptualized, even to the most minimal degree, evinces, from within, some promise of *generality*.

3. Bivalence is not enough

Premise 3: Resemblance entails more than merely something that bears similarity with something else; there must be a mediating function, a 'third', capable of bringing them together in the same way it brings itself together with them.

It becomes increasingly apparent that bivalence — feeling and thinking and reacting solely in terms of binary conflicts — simply isn't enough. There must be some 'third term', some 'third space', some *mediation* between sign pairs, some *middle way*, when taking individual signs into consideration, or when considering *interdependency*, *interrelations*, and *interactivity* among signs (Kalupahana 1986).[4]

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4   Peirce gives us a hint of this *middle way* (whose origin comes from second century Buddhist thinker Nāgārjuna (1967)), in his concept of 'ground'. He tells us that a sign's *quality* (of category Firstness) implies 'ground', its *relation* (Secondness) implies 'ground' and some correlate (with some *semiotic object*), and its *function*, giving rise to meaning (Thirdness) implies 'ground', correlate, and its

Take *King* as a sign. The sign can be an image — an icon in the most basic sense — in possible *interdependency* with a host of other possible signs (the King as father of the people, for example). It can indexically *interact* with some object, act or happening, with something *other than* the sign (the King's unique *beard* as an identifying feature). Or it can be a symbol, the word 'King', in *interrelation* with this particular royal figure and as a member of the class of individuals that go by the same name. If *King* is the *sign* (*representamen*), and the object, act or happening with which the sign interacts is what usually goes as the *semiotic object*, then there must be some *mediator* (*interpretant*) capable of mediating between *sign* and *object* at the same time that it *mediates* between itself and them.[5]
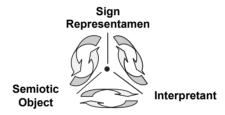

Figure 1. The triadic Peircean sign.

This, of course, is of the nature of Peirce's sign. But not in the form of a triangle, as it is often depicted: it is, more properly illustrated, a

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interpretant (CP 1.556–.559). 'Ground', in this sense, lies outside the parameters of Peirce's three categories; it bears on what he occasionally alludes to as 'nothingness' (Nāgārjuna's 'emptiness') (CP 6.189–222), which, as 'nothingness', nonetheless 'contains' the wherewithal for the emergence of 'everythingness', including what we take as our 'physical world', which is always becoming something other than what it *was* becoming (see Kalupahana 1986; Loy 1989; merrell 2010).

5   Notice that I wish to distinguish between (1) *King* as material or mental sign, (2) 'King' as the word, also a sign, which indicates the material or mental sign, and (3) King as a member of the items in what Peirce calls the 'brute' physical world.

'tripod' (see Figure 1). Notice that, unlike a triangle wherein the extremity of each line is connected to an extremity of one of the other two lines but not both of them, an extremity of each line of the 'tripod' links up with that of the other two lines, with the central 'point' acting as the *universal mediator* — the *possibility* of a *possible* sign. Notice that each of the lines can alternately take the role of sign, semiotic object, or *interactive mediating interpretant*; thus the figure is, so to speak, 'democratic'. And notice that, unlike the triangle on a two dimensional (customarily Euclidean) plane, the 'tripod' image involves three dimensional space, and that, rather than fixed, the form is polymorphous, *processual*, perpetually changing (for further on the function of the 'point', merrell 1997, 2000, 2007, 2010).

Now, what about creation of a metaphor by way of resemblance? Say, *King* and *Lion*. *King* is the sign lending itself to metaphorization, *Lion* is the object-sign of the metaphor, and the interpretant, or mediator as it were, creates — in collaboration with the metaphor-making subject, who is also a sign among signs — metaphorical *interdependent, interrelated interactivity*. We might simply say that the mediation creates the message and the meaning, and be done with it. But that would be too simple. We, also, are interpretants: we interpret the sign, while the sign, mediated by ourselves as mediating inter-pretants or interpreters, mediates itself with our signs and with us. In this manner, we *co-participate* with our signs in the process of bringing about mediation. And what is the yield of this mediation with respect to the *King-Lion* metaphor? Let us provisionally call it *LionKing*. Simple enough, it might seem.
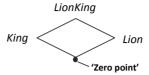
Figure 2. Complementing bivalence.

But for theoretical purposes, too simple. For this operation could easily be qualified in bivalent terms, perhaps as in Figure 2. This image could give a false impression of the metaphor, because if there is mediation — which must be the case in the process of metaphorization — there must be some third term charged with the duty of mediating and moderating the two way conflict. Of course one might retort that there is no conflict between Kings and Lions. Kings are Kings and Lions are Lions, and if there are a few points of resemblance between them — powerful, ruler, authoritative voice, strength, domination, or whatever — then there are grounds for metaphorization, and that's that.
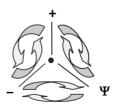

Figure 3. A possibly possible sign.

However, Figure 2 is actually less bivalent than one might think. Notice that there is no direct line between the 'zero point' at the bottom of the rhombus — which, like the peak of the tripod in Figure 1, depicts *possible possibilities* for sign creation — and the uppermost

portion of the rhombus, where the metaphorical process comes to fruition. Notice also that there is a continuous path from the 'zero point' through *Lion* to *LionKing*, and another one through *King* to *LionKing*, but *Lion* and *King* remain unlinked until the metaphor has been properly consummated. This implies *nonlinear interdependent interrelations* of *complementarity*, and *context dependency*, between *Lion* and *King*. What I mean by this is that there is a form of 'logic' to Figure 2, but the 'logic' is that of *complementarity* rather than bivalence, of *nonlinearity* rather than linearity, of *context dependence* rather than context freedom.[6]

In terms of this 'logic', disjunctive interrelations between *Lion* and *King* entail: *Lion* x *King* = •, where 'disjunction' includes commonality, or 'areas of possible resemblance', between one term and the other — as in Yin-Yang, where the Yin in Yang and the Yang in Yin are no more than *possibilities* (at the 'zero point') until *actualized*. If *Lions* were *Lions* and *Kings* were *Kings*, and never the twain could meet, with no 'areas of possible resemblance', then 'disjunction' of *Lion* and *King* would leave us with nothing but the 'zero point', zilch. However, given the 'areas of possible resemblance', when the nonlinear, comple-mentary metaphorical process comes into play, it is through 'con-junction', addition, or the inclusion, of everything regarding both *Lion* and *King*. That is: *Lion* + *King* = *LionKing*. *Lion* and *King* have in this manner been mediated, thus yielding the metaphor. So far, so good.

And yet, Figure 2 still lacks something. It isn't processual enough. Let us look further.

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[6]   Neither space nor time is permitted in this essay to give a detailed articulation of the makings of Figure 2, as well as Figure 4 below. These figures are a variation of what is called 'quantum logic', a nonlinear, context dependent, 'logic' of complementarity which doesn't faithfully abide by the classical logical Excluded-Middle Principle (for relatively non-formal discussions of this alternate 'logic' see Heelan 1970, 1971, 1983; Putnam 1971, 1983; merrell 1995, 2000, 2005, 2007).

3.1. Mediation flows into the scene

Figure 3 offers a processual Peircean triadic rendition of what I have dubbed a *presign*, which is basically included within the concept of the 'zero point' (or, if one wishes, it is implied in Peirce's 'ground'). It entails no more than *possible possibilities* for actually signness: the emergence of an iconic sign of possible resemblance, an indexical sign of the *other* of possible resemblance, and a symbolic sign mediating the 'areas of possible resemblance' of the icon to the indexical *other*.

The three interchangeable legs of the tripod are endowed with values of positivity (+), negativity (−), and mediation (Ψ). In that order, there is Firstness — what *is* what it *is* (becoming) without (yet) having entered into interdependent interrelation with any *other*. There is Secondness — what *is* what it *is* (becoming) in addition to some *other*, something that *is not* what it *is*, with which it has entered into interdependent, interrelated interactivity. And there is Thirdness — what *is* what it *is* (becoming) in addition to its mediating Firstness and Secondness and at the same time mediating itself through interrelated interaction with both of them.

Thus we can have: (1) the unmediated icon as a possible metaphor through resemblance with some *other*, (2) the unmediated index after the iconic sign has entered into interdependent interrelated inter-activity with some *other* (semiotic object) without their (yet) becoming mediated, and (3) the mediating symbol, whose role brings the meta-phorical process into the light of day. Resemblance, in this context specifically metaphorical resemblance, begins as mere *possible possibi-lity* at the central 'point', contained within the 'zero point' (Figure 3), which gives rise to: (1) *possibility* (iconicity), (2) interdependent inter-activity between sign *possibility* and some *possible other* (indexicality), and (3) that which interrelatedly has become apparent through *possible mediation* (symbolicity).

To the question 'Who or what mediates the mediating Ψ, or Thirdness, with Firstness and Secondness?', the response is: We do, all of us, as a

community of sign makers and takers! And we do, as, ourselves, signs among signs, as interpretants and interpreters of the signs we make and take, and as interpretants and interpreters of ourselves as signs!

3.2. Mediation as process

That much said, consider Figure 4, a *contradictory complementary coalescent* lattice emerging out of Figure 3, or the 'zero point'. At the first tier of the lattice, 'King' (the principle word-sign, replacing +) and 'Lion' (the *possible* word-sign, replacing −) are the terms as they are ordinarily used in the literal rather than metaphorical sense, while Ψ_1, the mediating, interpretive function (interpretant), brings implications of conventional attributes with which the two signs in question are endowed (powerful, ruler, authoritative voice, strength, domineering, and so on).
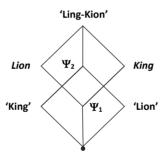

Figure 4. Contradictory complementary coalescence.

At the second tier of the nonlinear, context dependent, lattice of complementarity, *Lion* image-sign (−) and *King* image-sign (+) are the first two signs now placed within a metaphorizing context such that Ψ_2 highlights those attributes they have in common, given their emerging areas of resemblance. What they have in common must now interactively interrelate with both *Lion* and *King*: the two terms cannot

be separated, but must be included in the same context in order that their common attributes might enter into the metaphorizing process. But why 'Ling-Kion' at the uppermost point of the lattice? — one is certainly asking. Because the metaphorical process creates some new sign with a *polymorphized meaning*; hence the need for altering the symbol in the manner of *portmanteau* words ('Ling' = 'Lion' + 'King'; 'Kion' = 'King' + 'Lion') (see merrell 2007 for further, and Kauffman 2001, 2002 on the semiotics of *portmanteau* signs).[7]

Given the increased complexity of this lattice, we have 'King' and 'Lion', the word-signs implying the material or mental signs, *King* and *Lion*, and the yields of disjunction (x, product) and conjunction (+, sum), where disjunction indicates movement along a path downward until they meet, and conjunction indicates movement along a path upward until they meet (see the Appendix, for further). The possible *interdependent interrelatedness* of the Figure 4 lattice is as follows:

'King' x 'Lion' = • (in the ordinary literal meaning of the terms, they are mutually exclusive)

'King' + 'Lion' = Ψ_2

Lion x 'King' = • (*Lion* as metaphorizing process and 'King' according to the word's ordinary literal meaning are mutually exclusive)

Lion + 'King' = 'Ling-Kion'

$King \text{ x } \Psi_1 = \Psi_1$

$King + \Psi_1 = King$

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[7]   At this juncture I should also reveal that this *portmanteau* phenomena is precisely that used by Nelson Goodman in his *New Riddle of Induction* (1965) where he creates the mutually interpenetrating terms 'Grue' and 'Bleen' as alternatives to 'Green' and 'Blue' (see also merrell 2007, 2010).   This use of *portmanteau* phenomena is not as outlandish as one might expect, since in quantum theory it was once soberly proposed that *wave* and *particle* complementarity should be endowed with the synthetic label, 'Wavicle'.

Lion x Ψ_2 = • (the product must be the 'zero point' since the other member of the context, *King*, is absent)
Lion + Ψ_2 = 'Ling-Kion' (or *King* + Ψ_2 = 'Ling-Kion')
And so on

Thus the nonlinear, context dependent 'logic' of complementarity involved in polymorphic sign change processes, beginning with resemblance, and interactivity of the resemblance with some *other*, which then spills into interrelated symbolicity.

4. Vaguely generalizing the lattice

The terms in Table 2 can be, and among Western observers often are, taken for bivalent dualisms. Erroneous assumption, we've previously noted. Thus I placed 'paradigm' and 'syntagm' in quotes. The fact of the matter is that Day-Night, and so on, merge into one another through *complementarity*; they are actually quite comfortable within the Figure 4 lattice. 'Day' is 'Day' and 'Night' is 'Night', dichotomously speaking, at the lower tier of the lattice, and Ψ_1 brings them together as an antagonistic pair in the conventional sense, with one pole of the opposition potentially taking precedence over the other pole according to the circumstances, as if there were no more than a gaping chasm between them.

However, Day/Night becomes *Day-Night* — *complementarily* rather than *dichotomously* — according to nonlinear, context dependent complementarity thinking. This requires the upper tier of the lattice, where *Day* and *Night* are nonlinearly and complementarily mediated (Ψ_2), following conventional mediation (Ψ_1). In this process, *Day* becomes tinged with *Light*, and vice versa, such that there is a continuum of *possible possibilities* rather than merely an empty chasm between them (hence the hyphen in place of the virgule when combining the two terms). While this process might not appear very

appropriate for metaphoricity, as was the Figure 4 case, it is the same process insofar as there exists the possibility for fusion, for what I labeled above as the *contradictory complementary coalescence* of *Day* and *Night*, giving rise to the emergence of what we might venture to write as 'Dight-Lay'. In other words, like Yin-Yang, a bit of *Day* in *Night* and *Night* in *Day* provides for a hint — however vague — of complementarity and 'areas of possible resemblance' between the one and the other such that they can merge into each another and manifest the *vagueness* in any and all signs of *particularity* and *generality*.[8]

But why, one might now wish to counter, are these bastardized conglomerated and inordinately clumsy nouns, 'Dight-Lay' and 'Ling-Kion', necessary? If for no other reason, they are necessary for the purpose of illustration. The word-sign, 'King', is not the flesh and blood King himself, and neither is the material or mental image-sign *King* literally the King; likewise, 'Lion' is not a Lion, nor is it a *Lion* image-sign. In composite form, by means of their complementarity and their hint of some commonality or other, they have become something else, 'Ling-Kion', and they are still, and will remain, in the

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[8]   At the outset it would appear that there is hardly any conceivable 'area of possible resemblance' regarding Day-Night — or Yin-Yang for that matter. However, I have suggested elsewhere (merrell 2005, 2007), following certain aspects of Buddhism and quantum theory as I understand them, that the very idea of a line of demarcation between one term and another presumably contradictory term remains fuzzy and *vague*, like the terms themselves, since there is invariably a hint of the one in the other and the other in the one; hence it mediates, and brings about, their *contradictory complementary coalescent* character, rendering them neither purely the one (Day) nor the other (Night), but to a greater or lesser degree *coalescent*, and *convergent*. Moreover, Peirce writes at length that there can be no absolutely final *general* sign, for no sign that is so complete in terms of its *generality* that it cannot be completed a bit further; hence within every sign of *generality*, there is always at least a touch of *vagueness*; and no sign is so *vague* that it is completely devoid of some element of *generality* when so conceived as a sign; hence within every *vague* sign there is always some implication of *generality* (all this is, once again, comparable to the Yin-Yang principle) (CP 5.441–466).

process of becoming something other than what they were becoming. This is the nature of the *processual complementarity* lattice. The very process, spilling out and into 'Dight-Lay', bears witness to the virtually unlimited array of *possible possibilities* for spontaneously emergent fresh and new sign variations through their 'area of possible resemblance'.

This is to imply that there is a virtually unlimited number of *possible possibilities* between one term and the other of what might otherwise be taken for an intransigently antagonistic bivalent pair of terms. It also implies that there simply is no 'is', for whatever there apparently 'is', is always in the process of change, however minute. And it implies that no matter how precisely honed we might wish to sharpen a term, as mentioned in footnote 8, it is invariably tinged with a degree of *vagueness*. For solely by way of *vagueness* (chiefly of the nature of Firstness) can new signs in new flasks or old signs in new flasks spring forth as *particular* signs here and now (chiefly of the nature of Secondness), that are — often arbitrarily as it were — elevated to the status of *generality* (chiefly of the nature of Thirdness). But, once again, no matter how *complete* we might wish to make our *general* signs, there will always be some *vagueness*, and perhaps even *inconsistency*, which will serve to issue a call for some variation, or perhaps a wholesale replacement, of what we might have taken our sign to be.

Now let us ratchet the lattice up a notch by contemplating its embrace of nouns and their attributes.

5. What is becoming resists fixed labels

The very notion of complementarity tends to go against the grain of our Western ways of logical and rational thinking when we consider

such sign combinations as 'a white swan'.[9] The complementarity principle, for instance, tells us that '"A white swan" is not a "swan"'.

Absurd, we might wish to retort, for 'swan' refers to a class of organisms while 'white' refers to their color, and to say the one is to say — at least by implication — the other. However, naming the color is not the same as naming the general class of organisms; and yet, since nouns and adjectives, and different forms of speech as well, can be mixed, within contexts regarding everyday talk there's hardly any problem.

How so? 'Swan' is a *general* term alluding to the set of all *particular* 'swans', and 'white' is an attribute once considered common to all 'swans' in the *general* sense. 'A white swan' combines a *particular* with a *general*, 'a swan' with 'white', such that the *general* is as if it were a *particular* member of itself. However, did not Bertrand Russell (1910) warn us that 'swan', as a general category, cannot be a member of the class of all particular 'swans'? In other words, a map (part) is not the territory (whole); it is part of the whole, since if the map is read from within the territory it images, it must be included within that whole, which would contain a replica of itself, and that replica would contain its own replica, and so on, without end. The part isn't tantamount to the whole, and the whole shouldn't be considered coequal with one of its parts; by the same token, 'a white swan' is not tantamount to the general term 'swan'. The one is a particularity and the other is a generality.

Indeed, during one of his explorations of Australia, Captain James Cook (1728–1779) spied some strange swan like sort of aviary that were not 'white' but 'black', which eventually led to the concession that most swans are 'white' but some, namely a subspecies in Australia, are 'black'. 'Swan' as a *general* category proved *incomplete*, and it became a bit *more completely* qualified by the addition of 'black' to the

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9   See Graham (1992: 99–100), who within a comparable context uses a 'white horse' example from Chinese philosophy.

customary qualification 'white', and then, the erstwhile *inconsistency* involving the possibility of *both* 'black' *and* 'white swans' became (at least temporarily) *consistent*. Placing this polymorphic amendment within our complementarity lattice (Figure 4), we have the class of 'Swans' as *either* 'White' *or* 'Black' at the first tier, with Ψ_1 dictating 'White' and nothing but 'White', since 'Black' swans are deemed out of the range of possibilities. At the second tier, *Black* and *White* break out of their bivalent limitations and become complementary, with Ψ_2 serving to highlight the commonality between them as subspecies of the same species. And at the uppermost point of the lattice, we would have the *portmanteau* expression, 'Blite-Whack'.

In other words, particular swans can be *either* 'Black' *or* 'White', so the general class of swans contains *both* 'Black' *and* 'White' individuals; yet, given the incompleteness of any and all generalities, it may be the case that at some future time and place there may be a swan exemplification that is *neither* 'White' *nor* 'Black' but of some other characteristic color. We have, once again, Peirce: no *general* sign is so complete that it cannot take on some amendment, because it always conceals some degree of *vagueness*; thus *generality* and *vagueness* are complementary, and they cannot be simply reduced to mutual exclusivity.

Basically the same complementarity process inheres in the otherwise conflicting terms in Table 1. As a case in point, 'White' and 'Black' with respect to 'race' in the United States once had relatively positive attributes usually, though not always, linked to 'White' and relatively negative attributes usually, though not always, habitually attached to 'Black'. This is the first tier. Then, at the second tier, after considerable protest and violence and Civil Rights legislation was put into effect, and following a series of sometimes painful changes of mind and heart, 'White' began slowly polymorphizing into *White* and 'Black' into *Black*, made possible by their appropriate *mediation*. That is, the words, 'White' and 'Black', began becoming something other than what they were becoming, as the signs, *White* and *Black*, whether

in the world 'out there' as material signs or the world 'in here' as mental signs. Finally, something new emerged, which we might label 'Whack-Blite' with a nod to the lattice, hopefully revealing some change of behavior regarding material and mental worlds and the language use accompanying them.

In short, it isn't a matter of the more things change the more they stay the same, as the saying goes, but rather, the effort to force things into changeless conceptual schemes never succeeds in halting the inevitability of change.

6. On resemblance, in spite of the very idea of conceptual schemes

Yet, when current politically correct voices allude to 'Blacks' and 'Whites' with the assumption that their history of culture laden experiences leaves them talking past each other rather than engaging in viable dialogue, they are often implying holistic, virtually *incommensurable conceptual schemes* by talking along the lines of Jakobsonian 'paradigms' consisting of terms in conflict: 'Black/White'.

In this unfortunately bivalent manner, there are basically two antagonistic poles: Black culture/White culture, Black language(and vernacular)/White language(and vernacular), and the core terms, 'Black/White'. Consequently, semiotic subjects within one set of self-contained, self-reflexive, presumably self-sufficient conceptual schemes (from White culture), cannot help but talk past other semiotic subjects (from Black culture), as long as they all remain ensconced in their own world and conceptual schemes. And they will continue to talk past each other, because their conceptual schemes are virtually incommensurable, and because they enjoy no genuine complementary, context dependent, nonlinear mediation (as in Figure 4).

Donald Davidson (1984, 1986), for one, has a different story to tell about the viability of incommensurability. Departing from Willard V.

O. Quine's *meaning inscrutability* and *nontranslatability* of conceptual schemes, Davidson argues that we should forget about conceptual schemes altogether.[10] A conceptual scheme — or by extension a Kuhnian 'paradigm' — presumably cuts the world up in a particular way to yield a discontinuous, static set of entities. But our world, Davidson tells us, isn't tantamount to an aggregate of fixed terms and their meanings. It isn't like a mass noun that takes precedence over individual terms and meanings, nor is it a set of distinct count nouns or generic nouns the collection of which makes up a monolithic whole. Rather, it is we who organize our world by pragmatically choosing our words and putting them together in somewhat loose, fluctuating, flowing, and altering ways, in order to talk among ourselves about ourselves and others, and about our world.

In this manner, we have no clear cut meanings with respect to our organizing massive general nouns (universe, nature, nation, and so on) unless those nouns are made up of implicitly or explicitly acknowledged particulars (galaxies and stars, mountains and forests, leaders and people). For instance, if we wish to organize our closet, we arrange the particular things therein, and the idea of our 'closet' undergoes meaning change; but if we are simply told to reorganize the meaning of 'closet', we are at a loss for an immediate answer. How would we go about reorganizing 'ocean'? Pollute our oceans with oil spills, kill untold species of fish, disappear islands due to global warming. 'Ocean' undergoes a change of meaning, but it is due to changes of particulars contained within the holistic meaning of 'ocean'.

'Ocean' is a mass noun consisting of countless atoms and molecules, and coral reefs and fish and seagoing vessels and so on. The word implies a collection of individuals that we talk about in somewhat our own way; nevertheless since we have a 'feel' for these

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10   In doing so, Davidson builds on Quine's (1953, 1969) argument against 'two dogmas of empiricism', the *analysis/synthesis* distinction and *reductionism*, by proposing abolishment of a 'third dogma', *form/content*, or *conceptual schemes*.

individuals and the noun encompassing them, we go on with our talk, and we usually get along rather swimmingly, whether in the same language or across languages. We don't draw the line in precisely the same way between individual words, nor is our all encompassing word the same as that of other interlocutors. Nevertheless, we more often than not manage to communicate, because we have a feel for our language and our world and a feel for those with whom we are communicating (compare meaning change in this regard to the implications of Figure 4).

This notion of *generals* and *particulars* recalls Gilbert Ryle's (1949) example of the person who was given a tour around a university campus past the various buildings and other points of interest, during which time he broke in with the question: 'Yes, but where's the university?' 'University'? It is a general noun that enjoys no physical counterpart as do 'chemistry building', 'library', 'students', 'professors', and such. Yet it is a word we with the greatest of ease utter alongside nouns interrelated with their particular physical counterparts on campus. How would we reorganize the University? Construct a new chemistry building closer to the engineering building where it properly belongs, relocate the student union next to the cluster of dormitories for the students' convenience, and so on. And it's all done under the umbrella term, 'University'. Everybody on campus ordinarily understands talk about their 'University'; some agree with the reorganization while others disagree; they all lift themselves up by the seat of their pants when talking, because they are using words with respect to particular objects in the 'University' in hitherto rather novel ways, perhaps distorting a few meanings here and there, bending syntactic rules slightly, with voice inflections and gestures to get their point across.

And they communicate, usually quite effectively. There is no fixed conceptual scheme dictating what they'll say and how they'll say it. Rather, there is loose and limber pragmatic give-and-take (of the sort

proposed above with respect to Figure 4 accounting for polymorphic sign change).

7. Coping, when language breaks down

Davidson is perhaps nowhere more effective than in his talk about Ms. Malaprop, who comes from Richard Sheridan's play, *The Rivals* (1930). She is portrayed as a person who often doesn't know the proper word for the occasion, and as a result, in her effort to communicate, she tends to blurt out sentences that according to rigidly defined rules of speech would have no meaning. At one point in the play she means to say 'a nice arrangement of epithets' but she says 'a nice derangement of epitaphs'.

According to Davidson's interpretation of Ms. Malaprop's blunder, the linguistic object-sign of her 'Epitaphs' is 'Epithets', and the most likely meaning of her verbal error is likewise that of *Epithets*. The interpreter takes Malaprop's sign as a mistake and assumes it should have been 'Epithets', and he interprets Malaprop's utterance according to his assumption arrived at through the orthographic resemblance between the words involved (see Figure 5). The conjunction of Malaprop's sign and object within the context of the conversation gives an approximation to the interpreter's meaning of Malaprop's blooper; the conjunction of the interpreter's sign and object gives a rough parallel to Malaprop's mistake. The disjunction, overlap, or 'area of possible resemblance' of Malaprop's sign and its intended object ('epitaph/epithet') would under normal circumstances be next to nil (→ •); the disjunction of the interpreter's sign and object ('epitaph ≈ epithet'), given the adjustment of 'possible resemblance' he makes, affords him a viable interpretation. (In other words, the interpretation cannot be adequately intelligible at the level of Malaprop's 'Epitaphs-Epithets' sign-object combination at the first tier

of Figure 5, but must be adjusted at the second tier level of the interpreter's *Epithets-Epithets* combination.)
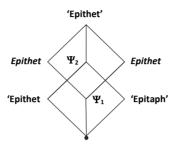

Figure 5. Complementing rhetoric.

This is to say that the disjunction of the interpreter's sign or object and his interpretation, if taken at face value, would also be virtually nil. In order that a proper interpretation may be forthcoming, the interpreter must take Malaprop's sign, object, and interpretation into due consideration within the context of the conversation, and since the sign involves incommensurability made complementarity, if such complementarity had not been forthcoming through the interpreter's astute reassessment of Malaprop's linguistic dissonance, the yield would have remained none other than virtually nil. The entire context of Malaprop's utterances, including signs, their linguistic objects, imagined mental signs and possible alternate objects created by the interpreter, past signs in Malaprop's and the interpreter's experience, and the socio-physical context of the utterance, must be taken into consideration. It's a *holistic* enterprise, for sure.

We are not dealing with a theory of meaning of individual words as if we had a *dictionary* programmed in our heads, or as if we had an *encyclopedia* of our past experiences, our present experience and anticipations of our future experiences in mind, all according to a coded, static set of signs and fixed rules for their combinations. We are dealing with a theory of interpretation (the imaginative creation of

interpretants via 'areas of possible resemblance'), of meaning processing within the flow of which everything is always becoming something other than what it was becoming. It is not a matter of what the signs the maker of those signs means according to some fixed, uncontextualized code, but what the maker means by the signs within the whole of their context. No sign is genuinely a sign unless and until it is a contextually interpreted sign.[11]

8. Playing it by ear, then

More specifically, according to Davidson, the interpreter uses his *prior theory* and *passing theory* to understand the speaker; the speaker uses her own *prior theory* and *passing theory* to guide her speech. For the speaker, the theories involve assumptions regarding how the interpreter will interpret her; for the interpreter, they involve prior assumptions and expectations that are adjusted by way of his passing theory in his ongoing process of understanding the speaker's message. Fortunately, people generally speak and interpret in similar ways.

Davidson's 'radical interpretation' doesn't require speaker and interpreter to inhabit the same language or different languages in basically the same way. Yet, if speaker and interpreter are forthright and honest, they will more often than not be able to make the necessary adjustments so as to communicate from 'a nice derangement of epitaphs' to 'a nice arrangements of epithets'. Thus Davidson writes:

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[11]   Eleanor Rosch's work on 'prototypes' (1973, 1977, 1983), revealing this amorphous nature of categories and generalities, is germane to this essay, especially given that, in collaboration with Francisco Varela and Evan Thompson (1993), she also reveals the implications of Buddhism and the contemplative tradition to her notion of pliable thinking and semantics.

> [T]here are no rules for arriving at passing theories, no rules in any strict sense, as opposed to rough maxims and methodological generalities. A passing theory really is like a theory at least in this, that it is derived by wit, luck, and wisdom from a private vocabulary and grammar, knowledge of the ways people get their point across, and rules of thumb for figuring out what deviations from the diction [rule fudging] are most likely. (Davidson 1986: 446)

In Davidson's conception (Davidson 1986: 442), for the hearer, the prior theory "expresses how he is prepared in advance to interpret an utterance of the speaker, while the passing theory is how he *does* interpret the utterance" (by means of 'areas of possible resemblance'). For the speaker, the prior theory is what she "*believes* the interpreter's prior theory to be" (*ibid.*), while her passing theory is the theory she "*intends* the interpreter to use?" (*ibid.*). In other words, if the interpreter knows Mrs. Malaprop, he knows she often confuses quasi-homonyms, and his expectations will be geared toward that tendency. His prior theory will be dependent upon his expectations, and his passing theory will be adjusted according to how the uttered pair of words and their quasi-homonyms interact. 'Epitaphs' and 'epithets' were not necessarily interrelated in his prior theory, but when they emerged, one explicitly and the other implicitly, one actual and the other possible, they interacted, and he made the necessary adjustments in order to interpret the utterance (Dasenbrock 1999).

In another way of putting this, Mrs. Malaprop leaves her utterance *vague*. In Peirce's conception of *vague* and *general* signs, it is up to the sign maker to further clarify a *vague* sign, and it is the sign taker's task to further specify a sign's *generality* (CP 5.505–516). Mrs. Malaprop, unfortunately, says what she says, *vaguely*, and leaves it at that. What is the interpreter to do? Take the *vague* clues Mrs. Malaprop reveals and (1) imagine, by means of 'areas of possible resemblance', what the *general* consequences might be if her utterance were interrelated and interacted with some possible combination ('epitaph' and 'epithet', 'disarrangement' and 'arrangement'), (2) consider the *particular* effects of these consequences, and then (3) adjust his present

premonitions regarding these consequences in view of his prior expectations, and see where it takes him.[12]

Davidson also uses an example from Lewis Carroll's Humpty Dumpty, who tells Alice that when he says 'glory' he means 'a nice knock-down argument', and that he is entirely free to decide what he means by any and all of his signs. That is, he creates a pair of explicit signs, he leaves them inordinately *vague*, with no further clarification, and it is up to Alice to bring some modicum of order to the confusion. However, Alice's perplexity grows because she is unable to take the two signs as *generalities*, interdependently interrelate them, and put them into interaction with one another, bringing order to the signs' *vagueness* and their radically *incomplete generality* by imagining what Humpty Dumpty might mean by them, and arrive at a tentative interpretation. Unfortunately, within the context of the conversation, Humpty Dumpty leaves her few clues for interpreting his utterance.

Apparently, Davidson's 'radical interpretation' is not exclusively a linguistic affair, but rather, it involves imagination (Firstness), consideration of the possible consequences of sign interdependent, interrelated interaction (Thirdness), and the interpreter's own interdependent, interrelated interaction with the signs (Secondness) in possibly arriving at some provisional answer…

9. More often than not, by improvising

Davidson's Malaprop example illustrates the importance of inter-pretation within a process that is linguistic and, contextually speaking, also extralinguistic. It is linguistic insofar as the rules of 'standard English' emerge and allow both sign maker and sign taker to 'get away

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[12] This process, by the way, is roughly that of what Peirce calls the 'pragmatic maxim' (CP 5.402, also 5.2, 5.9, 5.18, 5.427, for a discussion see Nesher 1983, 1990).

with something', namely, customary or conventional sign use. In Davidson's words, by 'getting away with it':

> [T]he interpreter comes to the occasion of utterance armed with a theory that tells him (or so he believes) what an arbitrary utterance of the speaker means. The speaker then says something with the intention that it will be so interpreted. In fact this way is not provided for in the interpreter's theory. But the speaker is nevertheless understood; the interpreter adjusts his theory so that it yields the speaker's intended interpretation. The speaker has "gotten away with it". The speaker may or may not […] know that he has got away with anything; the interpreter may or may not know that the speaker intended to get away with anything. What is common to the cases is that the speaker expects to be, and is, interpreted as the speaker intended although the interpreter did not have a correct theory in advance. (Davidson 1986: 440)

In addition to a linguistic theory or set of conventions that precisely and explicitly guides speaker and interpreter, there is an extralinguistic communicative context, and there are signs of greater or lesser *vagueness* and *inconsistency*, and of greater or lesser *incompleteness* and *ambiguity*. Speaker and interpreter interact with their signs within the linguistic and extralinguistic context that happens to have emerged, and they make and take signs as best they can by 'getting away with it' or departing from what are ordinarily taken to be the rules and conventions. In Davidson's (1986: 440) words: "We do not need bizarre anecdotes or wonderlands to make the point. We all get away with it all the time: understanding the speech of others depends on it?"

Given the element of *vagueness* in any and all signs, the notion of 'getting away with it' carries the implication that prior theories — the guess a speaker makes about how her utterance may be interpreted and the guess a listener makes about how to interpret an utterance — never exactly match (at the 'epithet'-'epitaph' tier of Figure 5), for speaker and listener can never know precisely what strategy the other has in mind in a particular communicative context. The speaker can never know precisely how the interpreter will take what she says, nor can the interpreter be certain in advance about the accuracy of his

interpretation of her words, since his prior theory constitutes only a starting place for interpretation. Both speaker and listener possess their own prior theories that swivel and swerve and change as they speak and listen. Together, they arrive at a roughly comparable yet *vague* passing theory that enables them to understand one another (at the *epithet-epithet* tier of Figure 5). Once understanding emerges (at the uppermost point of Figure 5), the passing theory fades to become part of an altered prior theory in view of how speaker and listener 'got away with something'. And, I must emphasize, they do this by improvising, by finding convergence between 'areas of possible resemblance'.

Thus we communicate by making informed guesses, guided by imagination's dance. We improvise the dance as we go along, and, within the sphere of Firstness, it cannot be rigidly codified, systematized, or taught explicitly — it can only be taught by experience, by example, and by practical application. Neither prior nor passing theories can be predicted in advance. They emerge spontaneously. One's linguistic prowess comes to bear in interpretation, for sure. But linguistic rules and regulations, and conventional language use, are of little consequence unless speakers and listeners know their way about in their everyday felt, imagined, sensed, and perceived world (entailing chiefly Firstness and Secondness), and their conceptual meanderings within that world (entailing Thirdness).

Satisfactory communication depends on our ability to feel, imagine, sense, and perceive and conceive the beliefs and intentions of others, and our interpretation depends on our creating imaginary scenes and in the blink of an eye tacitly taking in the possible consequences of these contrary-to-fact scenes. Since these imaginary scenes garner neither respect for, nor do they bear any malice toward, any linguistic code, we have no absolutely fixed, predetermined set of ideas or strategies: we are never adequately prepared in advance to make sense of our world. We have no static conceptual scheme that tells us what our world will be before we enter into communicative interaction. Our

passing theories are not simply a linguistic construct. They involve *context dependent*, and *interdependent*, *interrelated interaction* between speaker, hearer, and their signs.

10. In order to keep the process alive

Innovation and improvisation are at the very heart of communication. Whatever prior theories interpreters may have, their passing theories rarely fail to alter those prior theories during the interpretive process.

Thus every speaker, painter, dancer, composer and musician, and every scholar, during any and all aspects of human living, usually manage to 'get away with it', to deviate slightly, and even radically depart, from normal conventions of sign use. This involves meaning within contexts, and within contexts of contexts. Given this *holistic* enterprise, there is no problem in extending Davidson's theory to the range of all possible Peircean sign types, from icons to indices to symbols, and their myriad combinations.

Within a strictly linguistic or symbolic context, the absurdity of Humpty Dumpty's statement 'When I use a word it means just what I choose it to mean' becomes obvious. When he tells Alice 'There's glory for you', he cannot effectively and communicatively mean what he says within the context of the conversation, because there's no way, pragmatically speaking, that he can be communicating with Alice, since there is hardly any 'area of possible resemblance' between 'There's glory' and 'There's a nice knockdown argument'.

When Alice says 'I don't know what you mean by "glory"', Humpty Dumpty cryptically retorts 'Of course you don't—til I tell you'.[13] If

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13   This is what I alluded to above regarding Peirce's notion of *vagueness*; that is, it is up to the speaker to further specify the meaning of the *vague* sign, and it is the hearer's task to further determine the meaning of the *general* sign. In other words, if the hearer's passing theory doesn't hone in on the proper meaning, there's hardly any way she can interpret the sign and give it the proper meaning within

they had been communicating, Humpty Dumpty shouldn't have to tell Alice what he means. She would be able to divine his meanings by creating a pattern of *converging resemblances*. And Alice's adjustments to Humpty Dumpty's utterance would have emerged through *iconic resemblances* and *indexical interrelated interaction* before symbols or words could emerge into the light of day. Properly taking context into due consideration requires considerably more than linguistic signs.

Thus Davidson (1986: 440) declares that "there is no such thing as a language, not if a language is anything like what many philosophers and linguists have supposed". By the same token, in view of this essay's content, we might surmise that there is no such thing as signs, not if signs are anything like what many philosophers — and even some semioticians — have supposed. The problem is that many scholars have customarily taken meaning according to some relatively static set of symbolic signs (code) and the rules for their combination, rather than genuine *semiosis* as the process of signs that are always becoming something other than what they were becoming, through *converging iconic resemblances*, *indexical others* with which they *interdependently interact*, and *interrelated* symbolic *expressions*.

Which is to say that, as *semiosis* goes, so also our understanding of ourselves, our culture, and our physical world — by way of 'areas of possible resemblance'.

11. In conclusion

The Peirce based notion of resemblance developed in this essay entails fuzziness regarding the categories, sign types, and the nature of signs, as they travel through time and space. This fuzziness reveals the need

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the arena of sign *generalities*; and if the speaker's sign remains inordinately *vague*, he has little chance of communicating with the hearer, so he doesn't effectively know the meaning of his sign within that particular context.

for a 'logic' of broader scope than bivalent principles, although this more encompassing 'logic' must incorporate bivalent principles as a subset. All told, this 'logic', at the same time of greater *generality* and greater *vagueness* than bivalent logic, is best qualified as *nonlinear*, *context dependent*, and of *contradictory complementary coalescence*, in view of the processual nature of all signs.

Appendix. On the lattice

The Figure 4 lattice flies against formal Aristotelian principles: it is *nonlinear*, *complementary*, and *context-dependent*, according to the following characteristics:

1. The connectives, 'and' (+), and 'or' (x), are 'quantum logical', of the nature of logical principles developed specifically for quantum theory; they do not abide by the demands of classical Aristotelian logic in terms of the Excluded-Middle. This is to say that the ordering is no more than *partial*; it is not linear.

2. *Partial ordering* entails *nonlinearity*, or at best, *incomplete linearity*. Linearity is the case in the following sequences extracted from Figure 4, beginning with •:

- • → 'King' → Ψ_2 → 'Ling-Kion'
- • → 'Lion' → Ψ_2 → 'Ling-Kion'
- • → Ψ_1 → *King* → 'Ling-Kion'

And so on.

3. However, the following paths are not possible:

'King' → Ψ_2 but not 'King' → 'Lion'

Ψ_1 → *Lion* but not Ψ_1 → Ψ_2

And so on.

4. The lattice entails *context-dependency*. For example, context Ψ_1 is within context *King*, but not the other way around, context 'Lion' is within context Ψ_2 but not the other way around, and context *King* is within context 'Ling-Kion', but not the other way around, and so on.

Thus, *moving up* the lattice by conjunction yields greater, all-inclusive contexts: 'higher' contexts include the whole of 'lower' contexts. For example, Ψ_2 contains everything contained within both 'King' and 'Lion'.

5. The combination of all entities in the lattice proceeds toward 'Ling-Kion'. What has been termed 'emptiness' or 'nothingness' in this essay is the source of any and all contexts; it gives rise to •, and then to all possible paths within the lattice.

6. *Moving down* the lattice by disjunction limits the context, since it entails inclusion of no more than what one term and another one have in common. For example, the product of *Lion* and *King* is Ψ_1, which is to say that the context of Ψ_1 includes only what is common to *Lion* and *King*.

7. *Moving down* the lattice, in this sense, is roughly tantamount to formal disjunction, or 'x', but, in addition, it involves context dependency. In other words, disjunction, or 'the product of', limits the context. Thus we have the following:

Lion x *King* = Ψ_1

Ψ_1 x *King* = Ψ_1

Ψ_1 x 'Lion' = •

And so on.

8. *Moving up* the lattice is roughly tantamount to formal conjunction, or '+', and it also involves context dependency. In other words, conjunction, or 'the sum of', entails contexts of greater breadth. Thus:

'King' + 'Lion' = Ψ_2

King + Ψ_1 = *King*

King + *Lion* = 'Ling-Kion'

9. Disjunction selects what two or more terms have in common, as particulars, in line with *either/or* formal Aristotelian bivalence: true/false, black/white, self/other, and so on. Conjunction includes the totality of all possible implications of two or more terms, which is to say that the door is always left open, and the possibility exists, for

some term that was implicit to become explicit. In this sense conjunction allows for *interdependent*, *interrelated interaction* between two *incomplete* terms such that some new term may emerge that is *neither* the one *nor* the other but something else. Hence novel combinations can always emerge from what we might consider the *Included-Middle* rather than *Excluded-Middle*, and then move up the lattice to make way for new possible combinations. This is portrayed in 'Ling-Kion', which in an *incomplete* sense contains something of *both* 'King' *and* 'Lion', and at the same time, strictly speaking, it is *neither* 'King' *nor* 'Lion' (much in the order of Yin-Yang).

10. Thus insofar as the lattice allows for linear transitions (as in 2.) within local domains, the lattice as a whole is of nonlinear nature (as in 3.–9.).

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Сходство: с комплементарной точки зрения?

Три посылки составляют основу пирсовского базового понятия *сходства,* которое как Первичность едва отличимо от Вторичности и Третичности. Вовлечение Первичности во Вторичность и Третичность создает необходимость в небивалентном, нелинеарном, чувствительном к контексту образе мышления, который характерен для семиозиса — процесса, в котором все всегда превращается в нечто иное, чем то, во что оно начинало превращаться, — и в то же время в качестве одной своей части включает и линеарную, бивалентную логику. Некоторые аспекты даосизма, буддистской философии и «радикальной интерпретации» Дональда Дэвидсона предла-

гают добавочное и, очевидно, неожиданное дополнение к этим трем предпосылкам.

Sarnasus: komplementaarsest vaatenurgast?

Kolm eeldust on aluseks Peirce'i baasmõistele *sarnasus,* mis Esmasusena on vaevalt eristatav Teisesusest ja Kolmasusest. Esmasuse kaasamine Teisesusse ja Kolmasusse loob vajaduse mittebivalentse, mittelineaarse, kontekstitundliku mõtteviisi järele, mis on iseloomulik *semioosile* — protsessile, mille läbi kõik on alati muutumas millekski muuks kui see, milleks see oli muutumas — ja samas hõlmab see ühe osana lineaarset, bivalentset klassikalist loogikat. Dao, budistliku filosoofia ja Donald Davidsoni 'radikaalse tõlgenduse' teatud aspektid pakuvad algsele kolmele eeldusele lisandust ning küllap ootamatut täiendust.