Framing Signs Involves More Than Mere Words

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Abstract

This essay offers (1) a critical appraisal of the concept of ‘frames,’ but with (2) a sympathetic view toward George Lakoff’s appropriation of the concept in his analysis of the ‘war of words’ that continues to affect the current political scene. It argues (3) a combination of (1) and (2) would reveal some limitations of Lakoff’s prevailing ‘textualist’—or ‘language-centric’—approach, in light of Charles S. Peirce’s semiotic theory.

Keywords: categories, complementarity, degeneracy, frames, Peircean sign, textualism

Frames are mental structures that allow human beings to understand reality—and sometimes to create what we take to be reality.
—George Lakoff

1. Framing the Frame

George Lakoff tells the story about his teaching Cognitive Science 101 at the University of California, Berkeley. The first thing he does is to give his students an exercise consisting of an injunction: ‘Don’t think of an elephant!’ Whatever they do, they must refrain from thinking of an elephant. Lakoff never found a student capable of carrying out the task. He goes on to write: ‘Every word, like elephant, evokes a frame, which can be an image or other kinds of knowledge: Elephants are large, have floppy ears and a trunk, are associated with circuses, and so on. The word is defined relative to that frame. When we negate a frame, we evoke the frame’ (2004, p. 3).

A frame is a conceptual scheme, set within certain parameters and used for thinking and talking. It entails categories for classifying objects, acts, and happenings such that they can be placed in what is deemed their proper category. Armed with a set of frames that bear similarities—and some differences—with frames held by other members of
one’s community and by and large in harmony with the social conventions, norms, and rules and regulations of that community, one presumably has the tools necessary for effective communication. A frame is never alone, however. A frame is a frame by virtue of what it is in terms of its inter-dependent, inter-relatedness and inter-action with what it is not.\(^2\) But in the beginning, the frame is used as simply what it is. There is no other of the frame, not yet at least. First comes the frame, a positivity. Then the frame is revoked, negated. In other words, there is what the frame is not, a negativity. But negativity re-evokes what preceded it: positivity. With a nod to Lakoff, it would seem that you can’t have the one without the other.

Let’s put this issue another way. First we have a sign: ‘Elephant.’ Actually it’s no more than sound traveling along compacted and diffuse air pockets or a few marks on paper or the computer terminal. That’s all. It has hardly anything to do with that lumbering, pachydermous behemoth we ordinarily call an ‘elephant.’ Take the word ‘Elephant’ as a positivity. Take the actual animal with which the word inter-relates and inter-acts as a negativity. Hear or read the word ‘Elephant,’ and an image, or otherwise a thought, of the animal might spring up. The positivity evokes its counterpart, the negativity. Hear or read the injunction ‘Don’t think of an elephant!’, and you conjure up the image of or you think elephant, automatically, against your wishes and as if it were as natural as could be. Positivity brings about the emergence of negativity, and vice versa. Negating the frame evokes the frame; creating the frame evokes what the frame is not.

Lakoff offers four rules of thumb for frames: (1) a word evokes a frame; elephant compels one to think and talk about the animal in terms of what one knows about it according to what is in one’s memory bank, (2) words that qualify that word from within the frame also evoke the frame; ‘Hunk shovels hay into his mouth with his trunk’ evokes the idea, stimulated by the word ‘trunk,’ that the organism in question is an elephant whose name is ‘Hunk,’ (3) negating a frame evokes the frame; this is the case of ‘Don’t think of an elephant!’, and (4) evoking a frame gives muscle to that frame; by repetitive use, the frame becomes sedimented, entrenched, and habituated so as to be virtually automatically, and nonconsciously conjured up when the proper occasion springs forth; or in Lakoff’s words, every frame ‘is realized in the brain by neural circuitry. Every time a neural circuit is activated, it is strengthened’ (2006b).

2. The Peircean Sign

Take the word ‘Elephant’ as a sign, or a representamen in Charles S. Peirce semiotic theory. Take the animal with which the sign inter-relates and inter-acts as the object of the sign. Instead of the thought of an elephant, take the meaning of the sign, or the interpretant, as that which mediates the sign and its respective object in the same way that it in turn mediates between itself and the sign and its object. And you have the triadic Peircean sign: Representamen (or Sign), Semiotic object, and Interpretant. Place the three components in a diagram depicting the inter-dependent, inter-related inter-action between
them, and you have Figure 1. The representamen is what the object is not, and vice versa; the representamen is what the interpretant is not, and vice versa; the object is what the interpretant is not, and vice versa. Evoke one of the components of the sign and it usually provokes the emergence of one or both of the other components, and vice versa. But there’s an imbalance here. Evoke a positivity and you conjure up a pair of negativities. Where’s the symmetry in this?

Actually, what we need is positivity, negativity, and a mediator and moderator. In this light, take the representamen as positivity, the semiotic object as negativity, and the interpretant as mediator and moderator. Put the three signs corresponding to the trio of sign components in diagrammatic form the likes of Figure 1, and you have Figure 2, where the psi symbol, \( \Psi \), standing in proxy for the interpretant of the sign, mediates + and –, and in turn it mediates itself and each of them. Highlighting +, conjures up –, and vice versa, and the conjuring act is made possible by virtue of the mediating function of \( \Psi \), at the same time that \( \Psi \) mediates between itself and them. There is positivity, negativity, and the mediator and moderator, which is neither positive nor negative, but rather, it just is. It has no fixed value; it endows the other two sign components with value. But what does this have to do with Lakoff’s elephant? Where is it taking us anyway?

It is taking us toward the concept of complementarity: the sign contains, within itself, both the positive and the negative and, complementarily speaking, it contains neither the positive nor the negative. In other words, in addition to sign/object, or sign/meaning (signifier and signified in the structuralist and poststructuralist sense), there must always be a third term, the mediator and moderator of the first two terms, which is both
subject(ive) and object(ive), and yet it is neither the one nor the other.\footnote{3}

3. Peirce, and Process

Peirce’s pragmatic philosophy navigates in an effervescent, swirling, heaving sea of signs. The proper Peircean name for this process is \textit{semiosis}, which includes the range of all possible signs. At the most basic, ‘language’ makes up one type of Peirce’s fundamental signs. Language signs otherwise go by the name of \textit{symbols}. Symbols include, in addition to natural languages, mathematical, logical, and computational signs, among other abstract sign systems. The other two sign types are \textit{icons} and \textit{indices} (see Figure 3). In their most basic form, \textit{icons} merge with other signs with which they bear some similarity or other—create, in your mind, an \textit{iconic} image of the four legs of a table supporting it as comparable to the four extensions of a quadruped allowing it to ambulate, and you have ‘table legs.’ \textit{Indices} merge with other signs in terms of what are considered necessary links on the basis of natural connectivity, contiguity, cause and effect, part and whole, container and contained—think of lightning and its indexical thunder, a thermometer and the temperature, a country’s wealth and its GDP. \textit{Symbols} are signs that merge with other signs on the basis of social conventions—think of the word ‘legs’ corresponding either to a table or to a quadruped, that, as a sound pattern or marks on paper, has little to do with actual tables and quadrupeds out there or with the general category ‘legs’; the sign is what it is because that’s the nature of our English language conventions, which we all tacitly accept.

![Figure 3](image_url)

Now, if we ‘think of’ each of these sign types in some respect or other, we will be in the process of creating a set of symbols for conceptualizing them. Symbolic signs are undoubtedly the most effective signs for thinking and conceptualizing. But iconic and indexical signs precede symbolic signs in the semiotic process. Icons begin their process of becoming as raw images—whether of sight, sound, smell, taste, touch, or corporeal kinesthetic and somatic sensations. There’s no mind here, yet; there’s only body, or better \textit{bodymind}, within and in inter-dependence with, its environment. Indices begin their becoming as what we take to be their necessary and natural inter-relations and interactions with something else. No symbols—mind-signs, thought-signs, linguistic signs—
have entered the scene thus far. However, symbols are of utmost importance, since our ideas and thoughts about icons and indices are most effectively endowed with symbolic garb. So, if all that is, is ‘textuality,’ that is symbols, this ‘textuality’ is not what it is ordinarily taken to be. It must include iconic and indexical signs as a prelude to textual, symbolic signs. Change of mind is a matter primarily of symbolic signs, best used for thinking. But change of heart involves intimacy with concrete icons, and their respective indexical signs, within ourselves, between ourselves and our community, and between ourselves and our physical world.

Change of mind accompanied by change of heart goes against the current of bivalent, either/or thinking. Of course the natural tendency seems to be our penchant for cutting and classifying, and otherwise mutilating everything into either/or categories. This, however, is only one side of the picture, most specifically the symbolic side. When we include icons and indices along with symbols, bivalence fades. And signs become vague and ambiguous, that is, complementary. There are many possible meanings, rather than mere binary choices. And each meaning can slither into other possible meanings, vaguely, ambiguously, and complementarily.

4. The Message is the Means-Medium-Mediation, Which Calls for a ‘Third Space’

Fading bivalence calls for a three-way picture of the signs in question, as in Figure 3. Notice that the icon occupies the place of Peirce’s representamen—in common parlance roughly what is usually conceived of as the sign—while the index replaces the semiotic object, and the symbol stands in for the interpretant. The icon is what it is as self-contained, self-reflexive and self-sufficient, unless and until it has merged with something else, and when it does so it is no longer an icon, but has become an index. The index is a sign in the process of merging with its respective other. And the symbol entails the feeling, the sensation, and the thought or concept of the icon, the index, and their respective others, and articulation of the thought or concept.

In another way of putting this, iconicity knows of no either/or imperative, indexicality ushers in bivalence as something and that which it is not, and symbolicity gives thought and expression to the distinctions wrought by bivalent cutting and mutilating operations. In yet another way of putting it: (1) iconicity entails concrete, nonlinear, synthetic, holistic, spontaneous processes, as well as (2) the processual development of indexicality, while (3) symbolicity entails the construction of abstraction, linearity, analysis, reductionism, sequentiality. Is this not simply another either/or set of distinctions? So it might appear. But actually, between the either and the or, there’s a virgule, a third, a ‘third space’ so to speak. Taking all three sign processes into account, there is: (1) the medium as a whole, (2) the means of using the medium for communication, which breaks the medium up into linear sequences, and (3) mediation, emerging and operating within the ‘third space’ (see Figure 4).
When the ‘third space’s’ function makes its play, bivalence begins faltering, failing, and fading. Mediation by way of ‘third space’ does not simply produce trivalence. Producing trivalence implies an end of the line: product. There is no product, no fixed trivalent operation, but rather, process is the watchword. Mediation is ongoing, always creating something other, that never simply is what it is; rather, it is always becoming something other than what it was becoming. In this sense, we have a variation on the semiosic symphonic theme as depicted in Figure 4. Means implies positivity, medium implies negativity, what means is not. Mediation brings them together in a liquid embrace such that there is a spontaneous and pragmatically created method for the occasion, for the particular timespace context that is equally in the process of becoming something other. Where is the proud end, the culmination of means’ action? There is no end, for means, medium, mediation, and method always find themselves within the flux and flow of process, with the end always receding into the distant horizon.

Expanding this equation, there is: (1) signifier and signified, (2) the sign maker and taker and her collaboration with the sign, and (3) imaginary worlds and the physical world ‘out there,’ all making up the stage upon which the entire drama unfolds. There is sign, object, and mediation by a third that at the same time mediates itself and them. There is form and content, subject and object, and there is also inter-dependent, inter-related inter-action among sign makers and takers, who are none other than signs themselves within the vast semiotic sea. With a nod to Marshall McLuhan (1964), the medium is the message, for sure. But the means is also the message, and the mediation as well. The process is tripartite, and in incessant change. Nothing is fixed. To reiterate, everything is always becoming something other than what it was previously becoming.

But if, in view of Figure 4, bivalence fades, what replaces it? The answer is that nothing really replaces it. It fades, but like old soldiers, it doesn’t die. It becomes part of the complementary process.

5. What Kind of Elephants?

Reconsider Lakoff’s elephant. The second sort of complementarity John Bell alludes to in footnote 3 is what we might dub ‘pluralistic local-global complementarity.’ This entails
ambiguity within complementarity. There is a complementarity of local views, and there is a local-global complementarity. The elephant from the front view, the back view, the bottom view, the top view, and a view from one of the sides is of the same elephant as a whole with respect to those diverse local views, but the local views give a complementary picture of the elephant. (Buddhist philosophy uses this same elephant for illustration of its radically complementary nature.)

The elephant as a whole lending itself to a host of possible views and possible interpretations gives us a sense of iconicity. Everything is similar to virtually anything in some form or another, however trivial the similarity may be (Goodman, 1976). The elephant as image, as icon, is in this manner comparable to the means as possibility: a continuous, undivided whole waiting to be classified for the purpose of sign making and taking and communication. Classification by virtue of the medium creates either/or categories, necessary for communication. The elephant as index is in this manner exemplary of the medium for using, and often abusing, categories. But we can’t forget mediation, most effectively carried out by the symbolic function. In the best of semiotic worlds, this function mediates categories of the most general sort: concrete/abstract, nonlinear/linear, holistic/reductionistic, synthetic/analytic, spontaneous/sequential.

And so we communicate. We can talk about what ‘elephants’ are, what they do, how and why they do what they do, and what we do to them, virtually without end. Yes, we know a lot about elephants, don’t we? However, our knowing is overdetermined, which is to say that with respect to ‘elephant,’ the possibilities of our verbalization have hardly any end in sight. In other words, overdetermination gives rise to the emergence of a pluralism of differentiated, and often contradictory, mutually exclusive and inconsistent local views regarding our signs.

Pluralism by virtue of overdetermination yields complexity, and more often than not, perplexity. ‘Elephant’ for an Indian, an African, a New Yorker, an Arizona rancher, and a native Tarascan of Mexico, is hardly the same elephant, in addition to that same elephant from the front side, the back side, and so on. We have different linguistic renditions of the elephant, from within different cultural traditions. This attests to what should limit textualism (the overuse and often abuse of exclusive symbolic signs), that is, if it tends to ignore iconicity and indexicality within symbolicity. More problematic still, within the same language and culture, ‘elephant’ is never the same as it was. The word, and the animal, are always in the flux and flow of incessantly changing language and culture. Consequently, our categories cannot but become somewhat vague, fuzzy, and occasionally less clear and distinct than we would like.

Carl Hempel (1945) offers us an illustration of this faltering and falling of clear and distinct categories. He uses ‘black ravens’ in his argument. Since we’re thinking about elephants, I’ll use ‘gray elephants.’ We all (think we) know ‘All elephants are gray’—or at least, varying shades of gray. Who would want to question the proposition? We’ve seen elephants, elephant pictures, elephant mock-ups, and we’ve conjured up images of elephants. And they’ve all been gray, except when as children we colored them blue, or in

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our imagination we created elephants of some other color, say, pink elephants. Aside from this, we might tend to believe it is absolutely true that ‘All elephants are gray?’ I would tend to suppose all the elephants we’ve seen were gray, and all the elephants we will see in the future will be likewise. However, Hempel gives us the counterpositive to the proposition: ‘All non-gray things are non-elephants.’ Well, of course they are, comes the yawning response.

But think about it. Hempel tells us that in order to prove, without a possible shadow of a doubt, that ‘All elephants are gray,’ we must also prove ‘All non-gray things are non-elephants.’ Yellow finches, blue jays, pink flamingos, and blue sapphires and green emeralds must qualify. So each time we spy an elephant, we are confirming the proposition ‘All elephants are gray.’ And each time we observe a non-gray non-elephant, we are confirming the proposition ‘All non-gray things are non-elephants.’ In this sense, we must not only observe all elephants, past, present and future, in order to prove beyond any shadow of a doubt that they are all gray; we must also observe all non-elephants to satisfy ourselves that all non-gray things are non-elephants. A veritable interminable task, for sure.

To make a long story short, whales are not fish, as was once common knowledge; atoms are not minuscule solid, indivisible spheres; the Earth is not the center of the Universe; and space is not simply Euclidean. Our categories are never immutable in the absolutely absolute sense. What yesterday was considered a rock-solid category might today be up for grabs, and tomorrow it might be replaced by another category. Which is to say that our thinking and conceptualizing and talking and our knowledge are underdetermined—the counterpart to overdetermination as described above. Whatever we knew yesterday might be replaced by new knowledge today, and tomorrow another story might be told. Which is to say that our knowing is incomplete, for inconsistencies eventually emerge in our knowing that compel us to change our ways of thinking and talking. And from whence do these overdetermined inconsistencies emerge? From the range of all possible possibilities for thinking and talking. What is the nature of this range of all possible possibilities? Holistic, nonlinear, and ready and waiting to allow one or more of its particular possibilities spontaneously to emerge into the light of day from within a possible frame as a concrete something, to be cut and mutilated and classified.

So we’ve run the gamut, from the sphere of iconicity (holistic, and overdetermined, containing both the one,… and another,… and another,…n) to the everyday affair of indexical eithers and ors, to the sphere of symbolicity (entailing mediation of the former, thus allowing for the emergence of new modes of thinking and talking; hence giving rise to signs becoming other signs, or underdetermination). In short, we travel from overdetermination to presumed yet tentative and fallible determination to underdetermination, from medium to means to mediation and finally to message and meaning, from inconsistencies (where the classical logical Principle of Non-Contradiction loses steam) to distinctions (abiding by classical principles) to incompleteness (and the Principle of Excluded-Middle gives way to a Principle of ‘Included-Middle,’ which allows for the emergence of novelty).
Thus, in conjunction with Figures 1-4, and most particularly Figure 2, we have Figure 5. From the sphere of possible possibilities, the possibility of a sign emerges, creating an overdetermined possible frame (+), whose overdetermination, due to inconsistencies among possible signs, is inter-dependent with the means, with iconicity without otherness, in the form of a representamen. Then, in inter-action with the physical world or the imaginary world of the mind (other), a context-dependent frame emerges (–), by virtue of its indexical inter-action with the medium, an object of the representamen. But in order that the sign becoming may realize its potential as a genuine sign, there must be the perpetually ongoing process of framing anew, via mediation (Ψ) through the inter-relational symbolic function of the interpretant, which is to say that the sign will remain incomplete regarding its indeterminate array of possible interpretations, hence its underdetermined nature.

There’s more to Lakoff’s elephant than initially meets the eye. Given the complexity of our condition as homo loquens, it is no wonder that Lakoff’s ‘Don’t think of an elephant!’ would put us in a bind.

6. Elephants, and Other Quandaries

Actually, we find ourselves caught up in quandaries more often than we realize and more often than we would like. ‘Don’t think of an elephant’ is an injunction that in an indirect and implicit way puts us in an untenable situation. Let me illustrate this with three examples.

Example one. Suppose a parent, exasperated over her daughter’s apparent inability to learn a ballet move, tells her: ‘Honey, you just have to do it spontaneously.’ What is the child to do? If she goes about intentionally trying to be spontaneous, she can’t be spontaneous, thus she fails to heed her mother’s advice. If somehow she simply, tacitly, and without thinking about it, lets go of her inhibitions and makes the proper move spontaneously, she hasn’t intentionally gone about following her mother’s wishes, so she has not obeyed the injunction. She can’t think spontaneity and suddenly become spontaneous; she can’t be spontaneous by consciously willing herself to do so. She’s in a double-bind. She’s damned if she does and she’s damned if she doesn’t. Obeying
the ‘Be spontaneous’ command logically and reasonably requires conscious, willful and intentional action, which is out of the question if one is to become spontaneous spontaneously. The command calls for positive action, ‘Be spontaneous (by willing oneself to do so),’ which can be carried out solely negatively, ‘Being spontaneous (is not willing oneself to do so),’ thus turning Lakoff’s words inside out: in order to evoke a frame, we must (implicitly) negate it.

Example two. A young boy has learned a few things about the opposite sex from some older kids, and he makes mention of some of them around his father. Registering shock, the father tells his son: ‘Don’t think about those nasty things!’ He is given the implicit message that he should push these thoughts to the back of his mind so he won’t think about them; but if he succeeds in doing so, he might at some moment forget he has barred them from his mind and his thoughts and he risks thinking them and saying them, so he has failed to pay due respect to his father’s wishes. If he keeps in mind what it is he should not think about, he is thinking about it and he still fails to heed the command. He is told not to do something, but in order that he not do it he must do that which should be prohibited. Like the young ballet apprentice, he is damned if he does and he is damned if he doesn’t (Wegner, 1989).

Example three. This involves the liar paradox: ‘I’m lying,’ or better still, its equivalent, ‘This sentence is false.’ Is the sentence true? If it’s true, it’s false. Is it false? If it’s false, it’s true. Virtually countless debates have been waged and countless pages have been written about Epimenides’s quandary, but the paradox remains in good health, thank you. Like the previous examples, the liar paradox entails both positivity and negativity, but they can’t both be in effect in the same breath. They contradict one another, creating an infinite regress: true,… false,… true,… false,… . We might move up a level with the following: ‘The sentence “This sentence is false” is false.’ But what have we accomplished with this meta-proposition. If it’s false, it’s true, and vice versa.

One problem is that my words about the liar paradox up to this point are prisoners to bivalent thinking, and they remain obedient to classical logical principles, according to which a statement cannot be both true and false within the same timespace frame. If we move into a new timespace frame, we could have the liar saying: ‘When I said “I’m lying” I was only joshing.’ Or, with respect to the sentence bearing witness to its own falsity within a different timespace frame, we could say: ‘The pronoun “This” of “This sentence is false” was actually addressed to the sentence that preceded it.’ Yet the fact remains that within one and the same timespace frame, the liar quandary raises its ugly head. This spells the beauty and the beastliness of bivalent thinking. It also complicates the very notion of frames.

7. But,…

Now comes a rejoinder: ‘Don’t think of an elephant’ hardly bears anything of such anomalous nature. It’s a simple injunction. So what, really, is the problem here? On the
one hand, the problem rests in our thinking of the injunction bivalently. Protected by bivalent armor, we either think of an elephant or we don’t. If we don’t, we think non-elephantly; if we do, we think elephantly. In this sense at least, we are free of fused and confused contradictories, because we can’t think and not-think elephantly simultaneously; hence we pay homage to the classical logical Principle of Non-Contradiction. We also more often than not abide by the Excluded-Middle Principle, for we habitually either do the one thing or the other; there is no middle ground.

On the other hand, there is no problem, if we include classical logical principles within a more encompassing process entailing the becoming of what will have been and the will have been’s becoming something other than it would have been, had the bivalently logical operation had its inflexible linear way. And yet, bivalence usually has its way, within its proper timespace context. In this manner, classical logical principles involve local conditions within the global scene, conditions that, when they erupt into paradoxes of the sort illustrated above, are intolerable, bivalently thinking that is. How so?

Let the upper leg of Figure 5 be the entire range of all possible frames. As possibilities, thinking elephantly and thinking non-elephantly can exist side-by-side with no apparent conflict: after all, they are only possibilities; they can’t contradict one another as actuals. For Peirce, possibilities are ‘real,’ however. That is to say, both thinking elephantly and thinking non-elephantly are ‘real’ possibilities, albeit in a positive as well as in a negative sense. The injunction ‘Don’t think of an elephant!’ highlights thinking non-elephantly as positive possibility, and it wishes to push thinking elephantly into limbo as negative possibility. Yet both possibilities are ‘real,’ as possibilities on an equal basis.

Let the lower right-hand leg of Figure 5 reveal what has become conventional thinking, bivalently speaking, but, in time, it may cede ground to some form of alternate thinking that had previously been categorically barred. For example, space was once limited to thinking Euclideanly (in terms of straight lines), and any and all other forms of thinking were categorically barred. Now, space is a matter of thinking non-Euclideanly as a matter of course. But that doesn’t tell the whole tale. Actually, space is now neither a matter of thinking Euclideanly nor of thinking non-Euclideanly, but rather, of thinking otherwise, of thinking thanks to the process of some other thinking that arose from the Included-Middle and entered into the process of becoming something other: thinking Riemannianly (in terms of curved lines, and by extension space, in the Einstein sense).

As both-and ‘real’ possibilities, thinking Euclideanly during the grand epoch when Euclidean space ruled was positive, while thinking non-Euclideanly was negative. Then, when thinking Riemannianly began seeping up and entering into the light of day, it eventually emerged as neither positive nor negative possibility but something else. In other words, metaphorically speaking, it was the offspring of the In Figure 2 in the process of mediating positivity and negativity such that something new could be in the process of emerging. Thus the lower right-hand leg of Figure 5 has made its play.

But in regard to Lakoff’s injunction, ‘Don’t think of an elephant,’ what else can there be? There is no alternative. So it would seem. In order to more properly qualify both-and and
neither-nor explicit in Figure 5, some further words are demanded on thinking bivalently.

8. We Use the ‘Logic’ in Everyday Communication

Take a familiar injunction: ‘Love thy neighbor as thyself.’ It involves positive thinking, unlike Lakoff’s example and unlike most of the Holy Bible’s Ten Commandments—which is a telling tale in and of itself. The injunction says ‘Love thy neighbor and don’t not-love thy neighbor.’ There’s no alternative. Right? Well, not exactly. We would tend to assume that love is love and its diametrical opposite is not-love, or in another way of putting it, love’s diametrical opposite is hate. Love/Hate. It’s still thinking bivalently.

However, let’s begin thinking complementarily. In fact, let’s begin thinking of a product of thinking bivalently that was dear to George Bush’s heart prior to sending troops into Iraq. I’m thinking of good and not-good, or evil. Shortly after 9/11 Bush declared that the U.S. had been called to the mission of ridding the world of evil. America the good must eradicate all bad, however ugly the crusade might be. Our venerable president even specified the chief sources of evil: Iraq, Iran, and North Korea. Saddam Hussein, and the respective leaders of the other two evil empires were the new Hitler and Stalin. Alarm bells should have sounded loud and clear, for Hitler and Stalin wanted to do the same: rid the world of evil. They wanted to create the best of all possible worlds by ridding the actual world of its impurities.

We can turn the equation around by postulating that one of the main causes of evil has been the attempt to abolish evil. After all, did not Osama bin Laden see Bush as the embodiment of the evil that pervaded the U.S. and by extension the entire world? Did he also not wish to eradicate this evil in order to make way for Islam’s good? Are Bush and bin Laden mirror-images or what? Both could equally have said: ‘They’re either for us, or against us.’ The good/evil dichotomy is appeasing, because it gives us a simple answer to a confoundingly complex world. It gives us the smug feeling that we’re right and they’re wrong. This keeps us from looking further, from digging deeper, for fear of opening up an unwanted can of worms. But, if we reflect on the good/evil dichotomy, we will become aware of the two terms’ inter-dependence, their inter-relatedness, and their inter-action. To know good, we must know evil. To feel good, we must struggle with evil. What alternative can there possibly be to this state of affairs?

An answer is forthcoming, I would suggest, by introducing complementarity into the picture. George Lakoff writes that George Bush, like conservatives in general at least since the 1960s, have fine-tuned the element of fear when addressing the subject of evil. The evil ones are out to get us, so we’d best do unto them before they do unto us. Fear, along with horror, terror, and anxiety blend in with evil to move us toward the notion of the good in opposition to evil. Of course we should love our neighbors. Any good God-fearing Christian would readily tell us so.

And there we find the complementarity. Love is to fear (not hate) as good is to fear. If we’re good, we love our neighbors, but if those neighbors are evil, then they must be
feared, and if they’re feared, then they must be evil, so the unfortunate assumption often is that we must make war against them. If we make war against them because we fear them, there can be no peace until those who instill fear in us are either dead or converted to our side. Love and fear and good and fear and war and fear aren’t simple antitheses as are good/evil, love/hate, and peace/war.

Lakoff tells us that when you’re losing the battle of words, when you lose the advantage you had in the political war game, and even when in doubt, you usually play up the fear factor. For in the final analysis, each side fears the other side for what that other side is attempting to do to this side. This entails a mirror-image, reciprocal inter-relationship not unlike the Bush/bin Laden syndrome. The fear, the hatred and aggression of each of them, mirrors the other one of them. Like the Israel/Palestine conflict now a half century old, it is not simply a holy war between forces of good and evil, but a tragic infinitely regressive cycle of escalating violence and aggression fueled by mutual feelings of fear. Israel can’t live in peace, because they think the Palestinians are out to destroy them; Palestinians can’t live in peace, because they think the Israelis want to run them off and take over their territory. It’s a symmetrical zero sum game. Each side is determined to win and the winner takes all while the loser is decimated.

Where’s the alternative? Between love/hate and good/evil, the fear factor emerges from the Included-Middle, by way of mediation (Ψ) of the one term (+ or –: ±) and the other term (– or +: ±). The mediating process ushers in complementarity. When plagued with contradiction barring and rigid exclusion of any possible middle ground or ‘third space,’ complementarity can always stand at least an outside chance of coming to the rescue.

The question is: How? In order to answer this question, I turn to certain additional aspects of Charles Peirce’s concept of the sign.

9. The Sign, the Categories, and ‘Degeneracy’

We’ve taken note of the three components making up the Peircean sign. We’ve seen how the pre-sign, or the process of prefiguring the sign, occurs. And we’ve briefly considered the three basic sign types. Now for a word on Peirce’s categories that can be expressed with the same ‘tripod’ model (see Figure 6).
Briefly, Firstness *is* what it *is*, without any relationship whatsoever with any other. It is self-contained, self-reflexive, and self-sufficient. Secondness *is* what it *is*, insofar as it enters into inter-relationship with some *other*, inter-acting with it in the sense of something here and something else there, the first something possibly acting as a sign and the second something acting as the object of the sign. Thirdness *is* what it *is*, in the respect that it brings Firstness and Secondness together by *mediating* them, and at the same time it brings itself into inter-action with them in the same way they are brought into inter-action with each other (*CP* Vol. 2, pp. 227-390).

Firstness involves consciousness becoming; there is not (yet) any consciousness *of* the sign *as* such as a sign *of* something *in* some respect or capacity; in other words, Firstness is chiefly of iconic function. Secondness entails awareness on the part of the sign’s potential interpreter *of* the sign *and* something else with which the sign inter-acts—this is the indexical function. Thirdness brings in consciousness that the sign inter-acts *with* something else, its respective semiotic object, *because* they are engaged in such-and-such a set of inter-relations such that the sign in conjunction with its object calls for interpretation, such interpretation having already entered into the process of its becoming *by* its interpreter.

Most signs are incessantly in the process of becoming other signs of *increasing complexity*, from icons to indices to symbols, and from words to sentences to texts. Other signs are also in the process of becoming ‘degenerate,’ that is, of *decreasing complexity*. By ‘degenerate,’ I must hasten to point out, Peirce meant the mathematical use of the term, and it has nothing to do with the ordinary implications of the word as ‘deterioration,’ ‘decay,’ ‘corruption,’ ‘perversion,’ or whatever.

‘Degenerate’ signs involve the process of signs of *greater complexity* becoming signs of *lesser complexity* or *relative simplicity*. Signs having become ‘degenerate’ are signs made and taken by semiotic agents, whether human or some other form of sign making and taking organism, as a consequence of ‘habituation.’ That is, use of ‘degenerate’ signs entails sign activity that has become ‘sedimented’ and ‘entrenched,’ through repeated use, such that the signs are made and taken in a relatively simple, matter-of-fact manner, but *as if* they were signs of greater complexity. These relatively simple ‘degenerate’ signs are made and taken in ‘habituated,’ rather ‘automaton’ fashion; yet their meaning, or their interpretation, remains rich in implications of complexity. In a manner of speaking: (1) ‘degenerate’ and relatively simple signs embody the *possibility* of what they once were in all their complexity, (2) they contain the wherewithal for once again becoming (translated into) those complex signs they bear implicitly, and (3) if and when they have become translated into signs comparable to what they once were, their ‘habituated’ character will have been at least partly revealed.

Let me try to be more specific. A complex, elaborate symbol consisting of a combination of individual symbols, say, (a) ‘Good food is ordinarily expensive. McDonalds’ food is both inexpensive and good,’ is an evocation that for better or for worse might be made by millions of fast food consumers throughout the world. However,
few of them find the need to make such a relatively complex assertion regarding their preference. Customarily, if a carload of hungry travelers on the interstate spy a high rise Golden Arches icon, someone might blurt out: (b) ‘Let’s go for a Big-Mac,’ a relatively simple sentence consisting of various symbols. The entire enunciation could have been the rudimentary argument, (a). But it wasn’t forthcoming, since all persons present are prone to prefer the more economical version, (b). No need to engage in unnecessary talking. Or perhaps the evocation might have been a simple: (c) ‘Mac!’, a solitary symbolic sign. Or: (d) ‘Let’s do it’—a chiefly indexical commonplace expression the object of which remains unspecified outside some context or other. Or: (e) ‘There!’—an unspecified indicator, or index. Or perhaps even: (f) a person in the front seat of the car might look back at the others, nod, and turn her eyes toward the Golden Arches, and they give an agreeing nod, communicating quite effectively by nonverbal signs. Sign (a) is a relatively explicit text of generacy, which our travelers tacitly presuppose, (b) and (c) are relatively developed symbolic signs, though they are degenerate forms of (a). Signs (d) and (e) are symbols, but they need indicators, indices, and above all an appropriate context, for the intended communication; hence they are of a further stage of degeneracy. Signs (f) are even more degenerate; they are nonverbal, and thoroughly context-dependent. However, those latter signs, within their particular context, can be understood, and they can communicate, as effectively as their more elaborate counterparts. The difference is that their interpretation and ensuing message remains by and large tacit, implied, for they are signs that have become sedimented, entrenched, habituated (for further elucidation of Peirce’s ten basic sign types, see the Appendix).

In another way of putting this, the evocation ‘Big-Mac!’ could remain implicit, while the sign taker’s feelings and sensations—a visual image in the mind, that familiar impression on the taste buds, a somewhat greasy smell, the bland feel of a hamburger wrapped in slick paper, all from the memory bank—make up the iconic and indexical import of the sign. The evocation might be forthcoming in the next instant as a logical symbolic extension of the sign’s iconic and indexical input. This evocation isn’t necessary, however, as long as the semiotic import is there in terms of iconicity and indexicality. In this sense, the iconicity and indexicality are a degenerate yield of the symbolic sign. In this sense also, the icon and index embody the possibility for symbolicity; and what once might have been or actually was the explicit evocation, has its degenerate counterpart in the icon and index. As further illustration, allow me to put the notion of degeneracy in geometrical form, since, after all, Peirce’s notion of degeneracy is mathematical and geometric in origin.

10. Degeneracy: A Spatial Model

A point, by multiplying itself an infinite number of times in linear succession, can become (can be generated or translated into) a line. A line multiplying itself by the same process can become a plane, a plane a solid, and a solid a hypersolid. In other words, it is a matter
of zero-dimensionality becoming one-dimensionality, one becoming two, two becoming three, and three becoming four-dimensionality, as in Figure 7. De-engenderment, or de-generacy, then, would reverse the process. In this respect, just as a point has the potentiality for becoming a line, a line a plane, a plane a solid and a solid a hypersolid, so dimensionalities can, topologically speaking, also be compacted or compressed (by degeneracy) to a point (in technical terms, a ‘singularity’).

![Diagram of Generacy and Degeneracy]

In terms of the general semiosic process, the word degenerate carries the implication that symbolic signs can be made and taken as if they were signs of indexicality or iconicity. In reference to Figure 7, a symbolic sign having become sedimented to the first degree of degeneracy is tantamount to (is taken as if it were) an indexical sign, and a symbolic sign having become sedimented to the second degree of degeneracy is tantamount to (is taken as if it were) an iconic sign (Peirce, CP Vol. 2, pp. 246-272). In another manner of putting it, first degree mediation takes signs from Firstness to Secondness, iconicity to indexicality, and from feeling-sensitivity to sensation-perception, while second degree mediation takes signs from Secondness to Thirdness, indexicality to symbolicity, and sensation-perception to conception-articulation. Degeneracy, then, would reverse the arrows, from Thirdness to Secondness to Firstness, as in Figure 8.

![Diagram of Types of Sign Generacy through Mediation]

With the notion of degeneracy in mind, ‘Don’t think of an elephant!’ is a relatively elaborate sign, when considering the sign modes from (a) to (f) in the above examples.
The word ‘elephant,’ if taken out of its sentential context, is a solitary symbol that might be given many meanings within a variety of contexts: Africa or India, a National Geographic magazine, the local zoo, a Republican Party ad on TV, and so on. In most of these cases the sign can be chiefly iconic, in addition to its indexical and symbolic input on the part of the sign taker. Or one can simply think of an elephant or create the mental image of an elephant. The point is that from elephant symbols to indices to icons, the signs are becoming increasingly degenerate. Just as a point can become a line, a line a plane, and so on, so also an icon can become developed into a symbol, and just as a hypersolid can degenerate to a solid, a solid to a plane, and so on, and so also a complex symbolic text can degenerate to an image, and icon.6

Obviously, in view of iconicity and indexicality implicit in symbolicity, and of sign generacy and degeneracy, we are a far cry from ‘textualism.’ Now for a further word from Lakoff.

11. Wars of Words Must Include all Sign Types

Lakoff, in collaboration with workers at the Rockridge Institute, entered the ‘war of words’ in an attempt to frame public political debates for the purpose of aiding political progressives in counteracting the conservatives’ compelling arguments. One of Lakoff’s more effective case studies involves that phrase dear to republicans: ‘tax relief.’

When the word tax is added to relief, the result is a metaphor: Taxation is an affliction. And the person who takes it away is a hero, and anyone who tries to stop him is a bad guy. This is a frame. It is made up of ideas, like affliction and hero. The language that evokes the frame comes out of the White House, and it goes into press releases, goes to every radio station, every TV station, every newspaper. And soon the New York Times is using tax relief. And it is not only on Fox; it is on CNN, it is on NBC, it is on every station because it is “the president’s tax-relief plan.” And soon the Democrats are using tax relief—and shooting themselves in the foot. (2004, p. 4)

The key words and phrases, (1) ‘tax’ as a ‘burden’ rather than a ‘responsibility,’ (2) ‘relief from the burden’ rather than ‘sharing the responsibility,’ and (3) those who wish to ‘relieve the burden’ as ‘heroes’ and those who ‘perpetuate the burden’ as ‘villains,’ are ‘war words.’ A ‘burden’ is taxing; it limits one’s freedom, prevents one from developing oneself to the full; and ‘relief’ is liberating, physically invigorating, enlightening for mind and body. These are either growl words or feel-good words. In fact, one doesn’t really need the words at all. One can feel them in the gut; they are icons in the most sedimented, entrenched sense. As such, they are degenerate signs, signs standing in proxy for, and used as if, they were relatively explicit symbolic signs. But they are not; they are degenerate signs that automatically solicit deep, implicit positive or negative corporeal feelings.

In this regard at least, Lakoff doesn’t tell the whole story, since he sticks almost
exclusively to words, to language, or ‘textualism,’ if you will. But the matter is much more than words. It involves signs in the most basic sense. I didn’t write that these signs ‘automatically solicit deep positive or negative corporeal feelings’ felicitously. We saw positivity and negativity in Figure 2, the prefiguring of a possible sign. The possible sign isn’t yet a sign, but it can be in the process of becoming one, thanks to the mediator and moderator, Ψ. At the gut level, the becoming sign hardly need realize the symbolicity of its becoming. Becoming iconicity and indexicality is in most cases sufficient. For, after all, such signs need only attain the level of a growl feeling or a good feeling. Then there’s either a smile or a smirk in front of the TV where the president happens to be addressing the nation.

Lakoff’s ‘war of words’ includes alternate phrases the likes of ‘global warming’ and ‘green-house effect’ as opposed to ‘climate crisis’ and ‘environmental catastrophe.’ Proponents of one political camp tends to use the former and feel good about themselves, the other camp uses the latter and feels guilty. ‘Global warming’ doesn’t drive one to depression; it doesn’t push one into immediate action. ‘Environmental catastrophe’ can, and often does. In Lakoff’s words, we must ‘frame the debate’ properly. We must use the words that elicit the desired effect of the degenerate signs that the words imply. A catastrophe breeds alarm, from the gut (a degenerate sign). A crisis solicits a response, right here and now, as concerted and calculated but also spontaneous action (as degenerate signs) in order to counteract the crisis. They are by no means feel-good words (equally degenerate signs). They are, they should be, a call to action (Adler, 2007).

The entire gamut of signs, entailing multiple combinations of icons, indices and symbols, come into play in political strategies, spin tactics, lobbying cajolery, populist antics, blame games, and formal debates. It is not simply a matter or words, words, words. Words themselves come from non-symbolic signs of the heart through bodymind feeling and sensing, before, and often instead of, words from the mind.

Appendix

Peirce’s three sign types engender, and are engendered by, nine sign types, which can combine to engender Peirce’s basic decalogue of signs (see Table 1). I will not enter into detail regarding the nature of each of these sign types according to the examples offered in the right-hand column. What is of importance at the moment is the order of the ten signs given in the left-hand column. Notice that each sign type is qualified by the representamen (R), the semiotic object (O) and the interpretant (I), and that these sign components are qualified by three numerals specifying the Firstness, Secondness and Thirdness of R, O, and I respectively. It would appear reasonable to infer that iconicity is the chief feature of signs 1, 2 and 5, given that the object and interpretant are limited to category Firstness, which is to say that they are at this stage of the sign’s processual development no more than possibilities for becoming genuinely developed signs. Indexicality pervades signs 3, 4, 6 and 7, since the object and the interpretant are chiefly in the process of their development into Secondness, which entails the actualization of the
other of the sign. Symbolicity becomes predominant regarding signs 8, 9 and 10, the latter of which represents the culmination of the sign decalogue, having developed some aspect of Thirdness regarding its representamen, object and interpretant.

<table>
<thead>
<tr>
<th>SIGN TYPE</th>
<th>COMMON EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R₀O₁I₁</td>
<td>FEELING OF BLUE</td>
</tr>
<tr>
<td>R₀O₁I₂</td>
<td>VAGUE SENSE OF A FORM</td>
</tr>
<tr>
<td>R₀O₂I₁</td>
<td>RECOGNITION OF SOMETHING STILL INDEFINITE</td>
</tr>
<tr>
<td>R₀O₂I₂</td>
<td>AWARENESS OF INDICATION OF SOMETHING</td>
</tr>
<tr>
<td>R₀O₃I₁</td>
<td>CONSCIOUSNESS OF SOMETHING INTERRELATED WITH SOMETHING ELSE</td>
</tr>
<tr>
<td>R₀O₃I₂</td>
<td>PERSONAL PRONOUN</td>
</tr>
<tr>
<td>R₀O₄I₂</td>
<td>COMMONPLACE EXPRESSION</td>
</tr>
<tr>
<td>R₁O₁I₁</td>
<td>WORD</td>
</tr>
<tr>
<td>R₁O₂I₂</td>
<td>SENTENCE</td>
</tr>
<tr>
<td>R₁O₃I₂</td>
<td>ARGUMENT, TEXT</td>
</tr>
</tbody>
</table>

**Table 1**

**Peirce’s 10 sign types**

What is the importance of the subscripted sign components regarding R-O-I? Notice that from the simplest sign, R₀O₁I₁ to the most complex sign of the decalogue, R₃O₃I₃, there is a general progression. But it isn’t exactly linear—and this is indeed significant. The sequence from the first sign to the fourth sign is basically linear, but the fifth sign digresses with respect to O and I. Then from the sixth sign the linear progression resumes up to the tenth sign. Notice also that each sign is categorically distinct from the other nine signs. One would tend to assume, then, that each of the ten signs is capable of standing alone, that it is virtually autonomous, and that there is no necessary connection between each sign and any of the others. Not so, however. All ten signs remain indelibly inter-dependent, inter-related and inter-active, according to the context.

For example, when an apparently solitary image, sign R₀O₁I₁, enters the attention of a potential interpreting agent, it becomes the object of some feeling of something on the part of that agent, and then in a split second the agent sees it as a particular something with respect to something else within a particular context. Which is to say that the sign has already progressed beyond the Firstness of itself, its possible object, and its possible interpretant. It is a sign that has passed on into some other sign according to the transition: R₀O₁I₁ → R₂O₂I₁ → R₂O₂I₂ → R₂O₂I₃. In another split second the agent identifies the sign as something other that is so-and-so because it is of a certain nature and certain characteristics, according to the transition: R₂O₂I₂ → R₃O₃I₃. Now the sign can pass on to become a qualifiable pronoun, a commonplace expression, or a name labeling the sign (R₃O₃I₁, R₃O₂I₂ or R₃O₃I₃). Subsequently, the word can pass on and become incorporated
into a sentence ($R_3O_3I_2$) and an argument or text ($R_3O_3I_3$).

This ‘passing on,’ this process of relatively simple signs becoming complex signs, can occur in the mere blink of an eye. In other words, ‘passing on’ can entail: (1) raw corporeal feeling and sensing a sign, primarily of Firstness, (2) sensing and perceiving the sign as so-and-so, primarily of Secondness, and (3) mentally conceiving that the sign is so-and-so because it has been endowed by the semiotic agent with such-and-such a set of characteristics, primarily of Thirdness.

Sensing, sensing as, and perceiving and conceiving that, Firstness, Secondness and Thirdness, iconicity, indexicality, and symbolicity, or sign, object and interpretant, one might wish to assume, must involve three perceptual and conceptual acts separated by distinct lines of demarcation. Not so once again, however. For the process is just that: process. It can take place in what would seem to be a flash, and, given the semiotic agent’s persistence of feeling and sensation, it is taken in as if it were processual. For all intent and purposes it is processual, since, by virtue of our persistence of sensation, perception and conception, they appear to us as a continuous process. Indeed, framing involves more than mere words.

Notes
1 See also Lakoff, 2006a, pp. 25-48, and 2002, 2006b, 2007. For Lakoff’s earlier work forming the basis of his thought which is the focus of this essay, see Lakoff, 1987; Lakoff and Johnson, 1980, 1999.
2 I use the italicized terms ‘inter-dependent’, ‘inter-active’, and ‘inter-related’, 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).
3 I should very briefly qualify the meaning of complementarity. I would like to think that, as physicist Niels Bohr (1958, p. 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, p. 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 perspectives and the object as seen from an encompassing view. Bohr complementarity, then, has to do with inter-relations between a global view, on the one hand, and diverse local views, on the other (Havas, 1993). For example, the ambiguous ‘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 view it is ‘rabbit-duck’ (for further see Murdoch, 1987; Plotnitsky, 1994).
contemplamentarity as the term is used in this essay is of the latter sort mentioned by Bell, a ‘unifying concept,’ as in Lakoff’s ‘Don’t think of an elephant!’

4 Sandra Rosenthal (2001) considers Firstness ‘the most neglected of his categories’ due to the fact that it is elusive, vague, considered relatively unimportant with respect to the other categories, and also because of its characterization as ‘inherently inconsistent.’ While Firstness is ‘inconsistent’ through and through, that is no problem, since ‘inconsistency,’ of the very nature of Firstness, is itself self-contained, self-reflexive and self-sufficient.

5 Lakoff writes in an above citation that when a ‘neural circuit is activated, it is strengthened.’ Interestingly, neurobiologist Gerald Edelman says basically the same about neural circuitry in his own use of the term ‘degeneracy,’ much in the Peirce sense of sign degeneracy (Edelman & Tononi, 2000, p. 86; see also Edelman & Mountcastle, 1978; Edelman, 2004).

6 Think of a picture of Don Quixote for the professor of Spanish literature who has dedicated his life’s work to Cervantes. The mere image of the Quixote, a massively degenerate icon for him, is enough to elicit the generation of an entire lecture series—symbols all—on Cervantes’s masterpiece.

7 Thus the fifth sign plays a pivotal role, and it is the main actor in the process of signs becoming other signs (as I have argued in Merrell, 1995, 1997).

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