Thought Cognition Creativity

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The task is to understand and appreciate how we think. I am sure none of us thinks this is an easy task and I appreciate how in their book *The Way We Think*, Gilles Fauconnier and Mark Turner[1] are almost worshipful of the largely invisible and unknown processes they attempt to glimpse for us. And Lakoff and Johnson have written tomes on related topics.

In *Women, Fire, and Dangerous Things*[2] George Lakoff argues for an experientialist base for thought grounded in the givenness of our embodiment. Simply because we are human bodies our preconceptual experience takes at least two kinds of structuralities, basic-level structurality and kinesthetic image-schematic structurality. Both structure our experience in ways based on the distinctiveness of the human body. We could then say that these are natural, of our bodied nature.

Lakoff continues by indicating that there are two ways in which "abstract conceptual structure arises" from these two structurings. One is by metaphoric projection from the domain of the physical to that of the abstract; the other is by projection from basic-level categories to superordinate and subordinate categories. In the last lecture, my consideration of the structurality of metaphor led me to question that metaphor is a unidirectional projection from the concrete to the abstract. I proposed that metaphor structurality is better characterized as an incomplete reversibility. In Fauconnier and Turner it is more a blending. The "is" of the metaphor demands a comparative and negotiative process of entailment mapping. The hidden "not" of the structurality provides the incompleteness of the reversibility which gives rise to the chiasm in which creativity and knowledge and meaning may be generated. I also questioned the characterization of the two elements in terms of concrete and abstract and the implications of the concrete being embodied and the abstract being disembodied or of the mind. I proposed to alternately designate the elements of metaphor in terms of the visible and the invisible. Furthermore since the invisible is bound to feelings and to emotions , the invisible is also inseparable from the body.

Lakoff uses the verb "arises" to indicate the temporal and value interrelationship between basic-level and kinesthetic image-schematic structures and abstract concepts. Applying his own style of analysis, the word "arise" is based on the up-down kinesthetic image schema and invokes the metaphor BETTER IS UP. It designates a temporal relationship which would indicate that abstract concepts come after embodied natural structures, but that the abstract concepts are "better" or "higher." The temporal ordering is, I believe, in service to arguing that body is more basic, more natural, than mind and that the mind cannot function without the body. However, there is in the word "arise" a bit of a residual of the old body-mind separation and hierarchy. I find it difficult to even grasp this temporal and unidirectional

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[1] Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (Basic Books, 2002).

[2] George Lakoff, *Women, Fire, and Dangerous Things: What Categories Reveal About the Mind* (Chicago: University of Chicago Press, 1989).

projection. If metaphor mapping is unidirectional, then what can be the object on which the entailments of the source are projected? Doesn't there need to be something there, something that has some independently discernible characteristics to be able to receive these unidirectional projections? How do these so-called abstract concepts gain these pre-projection characteristics if not by bodily experience? I don't think these questions can have adequate answers under Lakoff's projection scenario. Therefore I don't think it is possible to maintain that there can be mappings from a physical to an abstract domain. These problems raise for me questions about the basic term "abstract conceptual structure." The word "abstract," as it might apply in this situation, would mean something like a general concept without a specific example or a category apart from case, or it might mean an existant only of the mind and thus separate from embodiment, or it might mean ideal or general rather than specific, or something that does not represent external/experiential reality. The word "concept" is then in some senses redundant with abstract in indicating an abstract or general idea inferred or derived from specific instances. It seems that the principal distinction of "abstract concept" must be its independence from body. When I think through all the implications of this term, it seems to me that if there is no concept existing prior to the metaphoric projection of entailments, then there can be no reversibility, no sense of the fit of metaphoric mapping, no choices made among which entailments of the source term are appropriate. The projection cannot be "on" to any target at all; it can only be a transformation into another form. The result would be that the so-called "abstract concept" can then only be a reorganization of the source term.

What are the implications of this proposed alternative that metaphor structurality is incomplete in its reversiblity and that both terms of the metaphor are necessarily inseparable from body? Surely we would need to posit that bodily experience is in the shape or structure of metaphor which has, at once, both a visible and an invisible, an internal and an external, presence. Abstract concepts do not arise from metaphorical projections they are copresent as constitutive of the structurality of metaphor. Metaphor is not a device to get from one place to another, one level to another, from body to mind; it is rather a resident type of structure readily available to digest interpret and expand knowledge and experience. It is an incomplete reversibility that supports oscillatory playful processes that make meaning and create newness. Metaphor is then a type of perception.

But what of the second way Lakoff describes how "abstract concepts arise"? This is the projection from basic-level categories to superordinate and subordinate categories. This is the process by which we move from the basic-level category, chair for example, to the superordinate category, furniture for example, or to the subordinate category, say rocker. Basic-level categories, Lakoff argues, are the first level to be acquired by children and they are "directly meaningful." So too with kinesthetic image-schemas which are those structuring schemas that come directly from our human bodies such as containers, paths, links, forces, and orientations such as front-back, part-whole, center-periphery. The question is, in part, is the superordinate category "furniture" based any less on body and experience than the basic-level category "chair"? Does the category "rocker" come from a projection of the bodily experience of chair in some way that suggests an abstraction to any degree greater than chair? Again

the term "projection" suggests a unidirectional process and I simply can't comprehend how this is possible and, were it to occur, how the result can be somehow free of bodily experience.[3]

Where I once found great insight in Lakoff's and Johnson's understanding of metaphor as preconceptual and that the source term of metaphor was based in bodily experience, I now find myself questioning if we can actually defend the existence of anything we might refer to as an "abstract conceptual structure." I'm wondering how any of the attributes of the terms "abstract" or "concept" can be maintained. Yet, our folk understanding of how the mind works is supported by our quotidian language and certainly by academic and philosophical beliefs. What would an alternative look like? As I suggested above, bodied experience creates constantly shifting patternings, such as metaphor and sensorimotor programs, that are the means by which we live in the world in a way that appears meaningful. These patternings share a structurality of incomplete reversibility; they are all negotiative and oscillatory; they have components that are visible and invisible, external and internal; and therefore are all based on a primitive that we have come to think of as "pure depth." Metaphor is of *flesh*.

Following this discussion it is necessarily a matter of meaning and understanding; it is to place metaphor as a form of perception tipped toward meaning and understanding. Terms that may be more interesting are "meaningfulness" and "knowledge." Based on our folk perspectives, interestingly perpetuated in academia, we expect meaning to correlate with reason and logical resolution and knowledge to correlate with information and content. However, when we give up objectivism and transcendent reason, as I think we have no choice but to do, and embrace an experiential reality, meaning and knowledge correlate with fit and coherence. Interestingly there is yet to my knowledge a careful discussion of what constitutes fit and coherence, yet clearly both measures require a comparative and oscillatory process resolved in a sense of "happiness" or "comfort," both notably are feelings or emotions. That we have been satisfied to allow the process to stop or rest by invoking the terms "coherence" or "fit" seems premature, only shifting the issue to another level without yet resolving it. I find it interesting that Lakoff's discussion[4] of knowledge is broadly dependent on vision metaphors and sight experiences. What we find is that the ground of knowledge, the measure of fit and coherence, is belief, feeling, and emotion all inseparable from the body in a visceral way and based on body in other important ways. What is missing from the articulation of these measures of meaning and knowledge is the "hidden" side of the structurality, that is, the absence of fit, the incoherence, the incongruity, the incredulity. While meaning may be measured by the satisfying feeling that accompanies fit and coherence, both of which release one from the oscillatory comparative process driven by the absence of this happy feeling, I suggest as I have before, that the meaningful is the capacity of something to tease with the promise of coherence and fit, yet perpetually to confound by revealing previously hidden elements that resist fit and coherence. Meaning and knowledge are dynamic processes, perpetuating

[3] Lakoff describes the various operations of what he terms the "conceptualizing capacity" (*Women*, pp. 280-1). Were I to have the time, I would critique these three" abilities" in similar terms. For all these the issue is that mapping onto something requires a pre-existent target with some structures and qualities and then the question is how do they get such qualities since their origination seems necessarily to succeed the precognitive experiences and structures arising from them. The other issue is invariably the unidirectionality of the "projection" process involved in all these processes of conceptualization.

[4] Lakoff, *Women*, pp. 297-99.

structures, thorny problems. Meaning is constantly absorbed in these structures increasingly filling them up, yet only occasionally, after long histories, if even then, do they become completely full. When something can no longer absorb meaning, it will be abandoned, no longer of interest. When, for example, do we completely fill the works of Shakespeare so that there remains nothing incoherent, nothing out of place, nothing more to ponder? As such structures are constantly interrelated with ongoing experience, they perpetually become fuller with meaning.

I must now turn to Gilles Fauconnier and Mark Turner's book *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. They argue the important point that "double-scope conceptual integration [what they commonly term "conceptual blending"] is crucial to the activities that make us what we are."[5] Conceptual blending is the way we think, from quotidian to high level cognition, engaged by all people of all mental capacities throughout life. Conceptual blending is done at lightning speed and we have evolved in such a way that we are not conscious of the process and further that we even find it difficult to tease into some presence. Conceptual blending is a "double-scope conceptual integration," that is, the mental integration at amazing speed of two extraordinarily different inputs to create new emergent structures. Fauconnier and Turner state their major claims:

> Nearly all important thinking takes place outside of consciousness and is not available on introspection; the mental feats we think of as the most impressive are trivial compared to everyday capacities; the imagination is always at work in ways that consciousness does not apprehend; consciousness can glimpse only a few vestiges of what the mind is doing; the scientist, the engineer, the mathematician, and the economist, impressive as their knowledge and techniques may be, are also unaware of how they are thinking and, even though they are experts, will not find out just by asking themselves. Evolution seems to have built us to be constrained from looking directly into the nature of our cognition, which puts cognitive science in a difficult position of trying to use mental abilities to reveal what those very abilities are built to hide.[6]

When the authors consider blending as compared with identity and analogy theory they write, "Identity and analogy theory typically focus on compatibilities between mental spaces simultaneously connected, but blending is not to obscure incompatibilities but, in a fashion, to have at once something and its opposite."[7] We can see that what Fauconnier and Turner understand as blending is similar in important ways to the structurality we have been developing. The way we think is characterized by a structurality that blends impossibilities and improbabilities to create new relationalities, new meanings, new knowledge, new patterns, all the while recognizing, however unconsciously and in hidden ways, that this process is, in some senses, based on sleight of hand and smoke and mirrors. The hidden incompatibilities drive the oscillation.

[5] Fauconnier and Turner, p. 389.
[6] Ibid., pp. 33-4.
[7] Ibid., p. 29.

As students of religion I want us to focus on one of the examples that Fauconnier and Turner give much attention, the Buddhist Monk Riddle. Let me repeat it here.

> A Buddhist Monk begins at dawn one day walking up a mountain, reaches the top at sunset, meditates at the top for several days until one dawn when he begins to walk back to the foot of the mountain, which he reaches at sunset. Make no assumptions about his starting or stopping or about his pace during the trip. Riddle: Is there a place on the path that the monk occupies at the same hour of the day on the two separate journeys?[8]

Fauconnier and Turner use this as an important example to illustrate in some detail the blending processes that are engaged by the riddle. Using diagrams they chart the initial "input mental spaces," the journey up the mountain and the return journey. Using other diagrams, they show "cross-space mapping," that is, the correlations between the input mental spaces. Yet, to resolve the riddle they hold that we create a "generic space" in which the separate input mental spaces may be related. This is basically that the upward and downward journeys may be played simultaneously even though this is physically impossible. Once this is created then another space is created in which the factors of the question of the monk's riddle can be placed to provide an answer. Basically one creates a space in which the monk goes both up and down the mountain on the same day rather than separated by several days. Although there is the "not" that it is impossible for the monk to go both directions simultaneously, it is yet part of the way we use blending to think. When it is realized that the monk going up must meet himself coming down, it suddenly becomes clear that there is indeed a place on the path that the monk occupies at the same hour of the day and that such a place must exist without regard to pace or pauses. Riddle solved … well at least in Fauconnier and Turner's reckoning.

While I don't contest Fauconnier and Turner's use of this little ditty to illustrate the blending process and its apparent results, I want to show that Fauconnier and Turner's approach to the riddle might be more creative. They only scratch the surface of blending … hmmm there must be a better metaphor … rather, they only blended tomatoes and onion when they could have made salsa.

First, let's look at the other example of the same situation as presented in the Spanish short story "*Páginas inglesas*."[9] Here a man must prove that he was "twice on the same spot at the same hour. He has just run down the hill in twenty minutes. The day before, he had climbed the hill in five hours. But the twenty minutes are contained in the period of the day spanned by the five hours."[10] Now there are important differences between the Monk's Riddle and this Spanish character's need for proof. To begin, Fauconnier and Turner refer to the monk's situation as a riddle, but they do not identify the event in the Spanish story using this term.[11] A riddle is a statement or question having a double or veiled meaning, put forth as a puzzle to be solved. Riddles purposefully misdirect and that is why we are fascinated by

[8] Ibid., p. 39. This riddles is from Arthur Koestler's book *The Act of Creation*.
[9] This story is by Spanish writer Pedro Zarraluki.
[10] Faucconier and Turner, p. 52
[11] I have yet to learn enough about this story to say much, but I did find that the story "invites us to solve a riddle in '*Paginas inglesas*,' which cleverly synthesizes metaphysics, arithmetic, and fine irony." Thus it seems that Fauconnier and Turner may not have actually considered this story in as much depth as they might have.

them. They make us think that we have the answer when our direct pursuit of the obvious misdirects us from the information crucial to the riddle being a riddle. A problem has no misdirection. Fauconnier and Turner consider what they persist in referring to as the Monk's Riddle, without ever acknowledging the distinctive structure of the riddle. In streamlining the riddle as a problem they also ignore that the traveler is a Buddhist monk, that the monk spent days on the mountain top meditating, and that the journey was to a mountain top. They gave more attention to the copresence of car and hiker in the Spanish story, which cannot be literal without the demise of the hiker, than they gave to these details in the other example. They miss the seduction of the riddle by their eagerness to produce a resolution to the problem that, I believe, serves to hide the actual center of the riddle.

Here is where we, as students of religion, may be better able to understand the Monk's Riddle as indeed a riddle. What are some of the blendings we might engage? Well, I am not a student of Buddhism, but I can give a start. As a student of Mircea Eliade, I can say that mountain tops are understood as *axes mundi*, world axes. A mountaintop is often the point where the creator and created separated as the world came into existence.[12] The mountain top is where humans go to meet god. Mountain tops are where heaven and earth meet. Mountain tops are where enlightenment occurs, where Moses is spoken to by god, as is Mohammed. Pilgrimages are destined to mountain tops, and so on. Buddhism is often described in elemental terms as an eight-fold path, that is, as a journey, and meditation is designated as the following of one of those paths. These paths are often depicted as spokes in a wheel and certainly the hub is homologous with the mountain top, with the world center as an enlightenment place. After enlightenment one is a bodhisattva, an enlightened one, yet still living a structurality where the "becoming" of physical existence is nullified by the "being" of the enlightened condition. Well, you all can continue this exploration which is certainly replete with blendings. Taking this path, the solution to the riddle would then be something like the monk occupies every place on the path at the same hour because, for an enlightened one, all paths as all times are copresent. [13] The riddle then returns to the problem of the copresence, yet now with a blend that required an excursion into Buddhism. This solution to the riddle pleases in far different terms than does the solution to the problem. And the resulting feelings of happiness arise in the awareness of the blending and co-presence of the wisdom of Buddhism being somehow reflected in a novel understanding of this much simpler matter of temporal copresence on a quotidian path. Where Fauconnier and Turner observe the "aha" moment in resolving the problem of temporal copresence, surely this is nothing compared to the "quiet smile" that bemuses the face of the one who blends this copresence with a copresence of an entirely different order.

I can't resist carrying this just one step further. Enlightenment then, in this example, corresponds to the experience of pure depth, thickness, flesh on which existence succeeds and depends. Enlightenment is a living in the chiasm, that gap where the "is" and "is not," where "being" and "becoming," co-exist in eternal play or *lila*. Okay, I'll stop with that.

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[12] Interestingly this setting apart of the creation from the creator is in some ways homologous with the structurality of perception and metaphor, yet the reverse. In creation the direction is from the invisible to the visible, while in perception and metaphor is runs the other way.

[13] I haven't yet looked up Arthur Koestler's use of this riddle in his book *The Act of Creation*, yet I will do so.

Perhaps Fauconnier and Turner were well aware of this richness and felt it better to ignore it so they could make their blending example in the simplest terms. However, I believe that it is clear that the example as I considered it is far richer and more interesting. It also enriches their basic insights regarding the way we think.

Finally, I want to turn to the topic of creativity. The question is something like "How do we think a new thought?" or "How do we come up with anything new?" In Peircian terms this is a matter of hypothetic inference. In Faucconier and Turner's terms it is a matter of certain novel blendings. Keeping Baudrillard well in mind, by creativity I do not intend anything like production or productivity. One of the things I am most concerned about as a teacher is the paucity among students of the sort of creativity to which I point. C. S. Peirce, I think, understood it well. Creativity, as hypothetic inference, is motivated by the experience of surprise, an emotional state that seeks stability and dissipation of unrest. An hypothesis is created to alleviate the conditions that give rise to surprise. Jonathan Smith, following Paul Ricoeur, as we have repeatedly mentioned, holds that "incongruity gives rise to thought." Mid-life, illness, and other passages may do the same. Crisis of almost any kind is a common stimulant for creativity. Unfortunately it appears that we must be bludgeoned and whackered into our creative moments.

There is perhaps an alternative and that is to understand the structurality of creativity and to cultivate an appreciation for incongruity or the hidden or seduction or provocation or pure depth or gaps or play. Creativity demands a manipulation of blending or double-scope conceptual integration. What drives creativity? Since creativity often seems a nuisance and has the potential to get one into trouble, why seek it? Creativity may be thought of as consciously and purposely engaging in blending, in double-scope integration. Creativity may be thought of as attempting to become aware of these blendings despite our seemingly being blocked from "looking directly into the nature of our cognition." We nonetheless may open ourselves to the occasional flashes that are emitted from these blendings, flashes in which we may see or feel anew. Creativity is to participate, even if from the sidelines, in this amazing, indeed awesome, process that, as Faucconier and Turner appreciate it, is "crucial to the activities that make us what we are." To be creative then is to exercise that which distinguishes us as human beings.