## Philosophical implications of cognitive semantics

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#### Abstract

Cognitive semantics is a philosophical, as well as a linguistic, orientation. The fact that our conceptual systems and reasoning are grounded in bodily experience and are imaginatively structured has wide-ranging implications for several crucial philosophical issues. What cognitive semantics reveals about the imaginative structure of concepts bears directly on the nature of meaning and human understanding. This, in turn, entails certain ontological commitments, including a view about how the mind works, human nature, and self-identity. The view of reason that emerges has striking consequences for our understanding of morality and politics.

#### 1. Issues that matter

Cognitive semantics is important, not just because it solves difficult problems of syntax, semantics, and pragmatics, but especially because of what it reveals about the nature of human concepts and reasoning. It gives us deep insight into how the mind works and thus into the way we understand and construct our worlds through interactions with our physical, interpersonal, and cultural environments. Moreover, cognitive semantics is providing converging empirical results concerning the nature of human understanding that challenge some of our most deeply-rooted philosophical dogmas about what it is to be human.

Some people will protest that, since cognitive semantics is still in its infancy, we are in no position to identify anything like a shared set of philosophical commitments. Because this approach is barely a decade old, it is to be expected that there exists no unified conception of our methodological commitments. In the first issue of *Cognitive Linguistics*, for example, we find already several differing accounts — by Geeraerts, Langacker, Lakoff, Dressler, Wierzbicka, and Fauconnier — of what our

joint project ought to consist in. In the absence of any consensus about the nature of our general orientation, it will seem to some people quite premature to suggest that there are any common philosophical assumptions and implications shared by the range of approaches that call themselves cognitive linguistics.

I strongly disagree. To the extent that cognitive semantics sheds light on the nature of concepts and cognition (and, if it doesn't, then why is it "cognitive" semantics, anyway?), it will have implications for a view of how the mind works. It will thus have implications for all aspects of our experience that depend on the nature of our conceptual system, including such things as meaning, understanding, knowledge, morality, art, and politics.

I am going to describe what I take to be some of the most important philosophical commitments and implications of one possible conception of cognitive semantics. It is, obviously, not the only conception one might have, but much of the work coming out of our joint efforts points in this direction.

As we will see, the empirical results I am focusing on call into question two dominant contemporary philosophical orientations: (1) objectivist views, which claim that there are absolute foundations for meaning, knowledge, and moral standards; (2) deconstructivist views, which deny foundations of any sort and which lead to extreme forms of relativism. Cognitive semantics provides extensive empirical evidence that neither of these opposing views of human conceptualization and reasoning is accurate.

In general, what we have found is that meaning and value are grounded in the nature of our bodies and brains, and in our interactions with our physical, social, and cultural environments. As Geeraerts puts it: "the formal structures of language are reflections of general conceptual organization, categorization principles, processing mechanisms, and experiential and environmental influences" (Geeraerts 1990: 1). The nature of our embodied experience constrains and motivates how things are meaningful to us. But besides being embodied, meaning is also imaginative. It depends on image schemas, metaphors, cognitive prototypes, metonymies, and other types of imaginative structure. Objectivist semantics misses the fact that, although our concepts have a grounding in our bodily experience, they are partly elaborated by structures of imagination.

Deconstructivism, on the other hand, misses the fact that semantic structure is motivated by the nature of our bodily experience. Cognitive semantics suggests a different philosophical orientation that goes beyond the objective/subjective dichotomy to a view of human meaning and thought as neither absolutely grounded nor merely arbitrary and random.

# 2. Some philosophical assumptions and their implications

What I propose to do is to set out six major areas of philosophical concern that circumscribe what I regard as the dominant conception of cognitive semantics and its insights about meaning, cognition, rationality, and morality. This list is neither comprehensive nor exclusive. It provides a sequence of connected thoughts for moving from issues of language to issues of morality. It is an invitation to start an ongoing debate about the significant philosophical implications of what we are doing in our linguistic studies. Many are bound to disagree with my particular vision of our enterprise. Let us at least make our differences known and open up a discussion on these humanly important aspects of our linguistic work.

#### Embodiment

We are beings of the flesh. What we can experience, how it can be meaningful to us, how we can reason about it, and how we communicate this understanding to other people depends on the patterns of our bodily experience (Johnson 1987; Lakoff 1987). The form meaning can take for us is prefigured in the way we inhabit our world, through our spatial and temporal orientation, our manipulation of objects, our perceptual interactions, and our bodily movements.

Cognitive semantics gives a central place to the role of our bodily experience in the structuring of our conceptual systems and, consequently, in the inference patterns of our reasoning. Human beings are neither lumps of matter, nor disembodied spirits. Rather, human being is a process of organism-environment interactions, in which both the organism and its complex environments mutually co-evolve. These ongoing interactions are at once biological, social, cultural, economic, moral, and political. Insofar as we are beings-in-process, our cognitive capacities have evolved in response to threats to our survival, the need for complex social interaction and communication, and the desire for enhanced meaning in our lives. Thus, the way things can be meaningfully understood by us depends, in large measure, on the kinds of bodies we have and the ways we interact with our physical and social surroundings.

Consider, for example, our bodily experience of force) Thousands of times each day we either experience natural forces acting upon our bodies or we exert physical force on objects in our environment. We feel the wind in our face, the baseball smacking our glove, our acceleration as we step on the gas pedal. We throw our energy into walking up a hill, we manipulate tools to mold and change objects, and we lift our children

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in our arms. We have a very basic and very complex range of bodily experiences of force, and we thus develop a complex bodily understanding of the varieties of forceful interaction (e.g., compulsion, attraction, speeding up, slowing down, etc.) occurring at this experiential, non-linguistic level. This is the embodiment of meaning, which provides a semantic basis for linguistic forms, meaning, and the structure of speech acts (see Sweetser 1990, whose analysis owes a great deal to Talmy, e.g., Talmy 1988). It is for this reason that many cognitive linguists tend to see syntax, semantics, and pragmatics as intricately interwoven, since they are all grounded in and highly dependent on the nature of our bodily experience.

The form and content of meaning at this bodily level are, for the most part, nonpropositional and beneath the level of conscious awareness. That there should be such a deep level of significance makes good sense from an evolutionary point of view. Long before we sat around the fire talking, we were solving all sorts of incredibly complex cognitive tasks involving highly developed bodily skills, and we communicated nonlinguistically. There is plenty of (non-linguistic) meaning in this kind of embodied activity, and language emerges out of this more primordial form of social interaction, just as it does for young pre-linguistic children (Paul Churchland 1979). Language is thus but one form of skillful coping activity that is crucial for our survival and flourishing.

One crucial consequence of this view of embodiment is that the body is not merely a text! However much my body is "culturally inscribed", it never reduces merely to a social experience. The experience of the wind in my face, or a knife in my back, is bodily, not textual, even though the meaning of that experience can be elaborated at great length by all sorts of culturally defined frames, metaphors, and other imaginative devices. Only someone seriously out of touch with their bodily experience could fool themselves into thinking that, just because their bodily experience is subject to interpretation, either their bodies or their experiences are nothing more than (texts.)

The fact of our embodiment suggests a promising hypothesis that is pursued by many cognitive linguists: We try to understand language, and meaning in general, as grounded in the nature of our bodily experience and activity. Along similar lines the philosopher Patricia Churchland has proposed an examination of the ways in which our "higher" cognitive functions have their origins in sensorimotor control:

Cognition is not neatly detachable from the organism's ecological niche, way of life, and bodily structure. Nervous systems are not general-purpose computers. They have evolved to accomplish a certain range of tasks, and the architecture supports the tasks ...

Looked at from an evolutionary point of view, the principal function of nervous systems is to enable the organism to move appropriately. Boiled down to essentials, a nervous system enables the organism to succeed in the four F's: feeding, fleeing, fighting, and reproducing. (Churchland 1987: 548)

The relevant aspects of our sensorimotor activities are those recurrent patterns that turn out to be necessary for our more or less successful functioning. The adaptive habits we develop involve patternings that give a measure of coherence and intelligibility to our experience. In order merely to survive we have to make an immense range of perceptual discriminations, (identify) recurrent objects and shapes, and move our bodies from one point to another.

In other words, we have to discriminate figure/ground relations, objectify parts of our perceptual interactions, track objects through a perceptual field, exert force to move objects into various spatial relations (inside/ outside, right/left, in front of/behind), and keep our balance as we move from one place to another. Among these sensorimotor activities just mentioned, we can recognize such recurring structures as OBJECT, FIGURE-GROUND, SOURCE-PATH-GOAL, CONTAINMENT, COMPULSIVE FORCE, and BAL-ANCE. Such recurrent patternings of our mundane bodily experiences are what Lakoff and I call image schemas. They are the malleable, flexible patterns of perceptual and motor processes and activities, structures that we both bring to our experience as anticipations of order, and that are also often modified as they are molded to fit slightly novel situations.

Image schemas are embodied, and that is why they can be meaningful for us at a non-propositional level. The experience of COMPULSIVE FORCE, for instance, is never merely an abstract formal structure we call "compulsion". Rather, it is the felt sense of forceful compulsion. It includes kinesthetic sensations, emotional significance, and a wide range of bodily responses. Image schemas of this sort form the basic contours of our lived experience. There is nothing propositional about any of this, at least at the level of our bodily experience. But the flexibility of these sensorimotor structures makes it possible for them to be drawn up into the structuring of more abstract concepts, propositions, and patterns of inference.

## 2.2 Imagination

Image schemas are structures of imagination. Unfortunately, many people have acquired an aversion to the use of the term "imagination" in relation to meaning and rationality, because this term calls up for them subjectivism, idealism, and relativism. This is one of the errors we have inherited from the Enlightenment, which regarded imagination as a non-rational, indeterminate, unruly, and idiosyncratic play of images or ideas. It is

time to re-establish imagination's good name, by seeing it for what it is, namely, our capacity for working up various degrees and levels of mean-

ingful order within our experience.

Imagination is what makes it possible for us both to grasp form and to compose novel orderings within our experience. As a basic part of this imaginative work; an image schema is the dynamic recurring patterning of our experiential interactions. I have argued (Johnson 1987) that this is close to the sense in which Kapt (1781) used the term "schema". We bring image-schematic patterns to our experience by way of anticipating certain kinds of order and relationships, and yet the application of those schemas to particular situations can sometimes change or transform them in subtle ways. Imagination, in this broad sense, is the locus both of our experience of a relatively stable world and also of the reconfiguring that world undergoes from moment to moment.

We need to get comfortable with the idea that human beings are fundamentally imaginative creatures and that imaginative activity is occurring every moment of our lives in our perception, conceptualization, and reasoning. Only then will we be able to understand why metaphor, metonymy, and other figurative processes are not just matters of language, but are constitutive of our experience and understanding. In this sense they are ontologically basic dimensions of our being, because they structure the way our world shows itself to us and the ways we can orient ourselves knowingly within it. Following Ricoeur (1977), we can describe a metaphorical process as "ontological" insofar as our actual experience is largely structured by systems of metaphor.

As an example, consider again our experience of compulsive force. Hundreds of everyday bodily experiences are structured by a recurring COMPULSIVE FORCE image schema. Already, this single schema must be imaginatively configured to fit the wide variety of situations we understand as cases of compulsive force. But there are also other experiences of compulsive force that are metaphorically structured. I may experience peer pressure as an overpowering force that makes me conform to a certain communal standard, say, dressing in a specified manner. While this is certainly not a physical force, it is no less real in my experience. Given my psychological and social makeup, it is a force that moves me to action.

Now consider an even more abstract metaphorical extension of the COMPULSIVE FORCE schema, that of being compelled by the "force of reason" to accept a certain theoretical claim. Again, there is no physical compulsion involved, for I am free to reject the claim. But ignoring the argument will not make the "force of reason" go away. For, if I had attended to the argument, and placed myself under the power of reason, I would have been so moved to accept the conclusion. I would have been moved along a metaphorically specified path (based on the source-path-GOAL image schema), according to the metaphorical system by which we understand argument as a journey. In this case my entire understanding of argument and reasoning would be metaphorically structured as movement along an abstract path (the course of the argument) toward an endpoint (the conclusion). I would actually experience the distinctive metaphorical force of reason. Again, this force is no less real for being non-physical and metaphorical in character.

This is the ontological and constitutive dimension of metaphor that manifests itself in our language because it occurs first in our experience, our conceptualization, and our reasoning. Our physical and social adaptability depends upon imaginative activity of this sort, especially the metaphorical elaboration of an image schema to connect different domains within our experience and to restructure our understanding of a situation.

One of the most basic ways we achieve coherence and comprehensibility is thus via metaphorical mappings of structure from one experiential domain to another that is different in kind. Such metaphorical mappings allow us to ground our conceptual systems experientially and to reason in a constrained but creative fashion. Numerous studies in cognitive semantics have shown how various kinds of bodily activity come to be source domains for systematic mappings onto abstract target domains, such as understanding and reasoning. Bodily acts of perception, manipulation, movement, eating, and procreation, for instance, all have their metaphorical counterparts in the mental activities of reasoning, communicating, remembering, and creating. What linguistic studies have revealed is that each of these systematic metaphors is a specific instance of what Eve Sweetser (1990) has identified as the generic-level MIND AS BODY

metaphor.

Table 1 is a summary of some of the more pervasive metaphorical systems that are instances of the MIND AS BODY metaphor. It shows how each aspect of our cognitive activity (e.g., thought, reason, memory, communication, creativity) is structured in different ways by different source domains that are grounded in the kinds of bodily activities we engage in. Consider, for instance, the way in which perception is a highly structured source domain for metaphorically mapping various cognitive acts. Each aspect of the cognitive or epistemic act has its (metaphorical) perceptual counterpart. (deas are conceived as perceived physical objects (as in, "I saw the facts immediately," "Can you grasp the main idea?"). Thinking is perceiving or observing (e.g., "I see what you mean," "From my viewpoint his assumptions aren't clear") Reason constitutes the ambient conditions that make perception possible, such as a light-source that illuminates an idea-object (e.g., "Could you shed more light on the hypoth-

Table 1

Table 1. THE MIND IS THE BODY	THE BODY				
	PERCEIVING	MANIPULATING	MANIPULATING	1.	PROCREATING
IDEAS	physical object	physical object	locations	pooj	offspring
THINKING	observing/ perceiving	manipulation of object	moving from pt. A to B	digestion/ preparation	gestation
REASON	light source/ ambient conditions	grasping	force that moves you	capacity to digest	fertility
MEMORY	re-viewing re-perceiving	storage (re- calling or retrieving)	going over same territory	regurgitation	
COMMUNICATION	showing	sending	guiding	feeding	intercourse
CREATIVITY	seeing from a new perspective (in a new light)	re-making re-forming	discovery	cooking up new combinations	giving birth

esis?" "We see by the light of reason that all ideas are innate," "That is the most illuminating argument you've made so far"). Remembering is re-perceiving or re-viewing an idea-object that one has previously perceived (e.g., "I reviewed the relevant argument," "Let's see if we can see the main concepts again"). Communication is sending of an idea-object through a conduit or medium to a receiver (e.g., "She got her idea across to me," "His intentions came through loud and clear," "Don't hand me that nonsense again"). Creativity is perceiving an idea from a new perspective (e.g., "You've made me look at things from a new point of view" "His theory realigned my perspective on the subject of continental drift," "Feminism changed my view of rationality entirely").

Notice that the prevalence of the MIND AS BODY metaphorical system in our experience, conceptualization, and reasoning suggests something quite important about our nature. It shows us that we are fundamentally metaphorical animals whose bodily being is the basis for a large part of our understanding! This is not optional for us, given our bodies and our neural makeup. We would be very different kinds of creatures if we did not understand things by means of this generic metaphoric system. We are, then, BODY-FOR-MIND experiencers and understanders.

However, it is important to see that claiming that the MIND AS BODY metaphor is not optional does not entail that it is somehow an a priori structure of rationality, or a so-called "innate" idea. What it means, instead, is that given the kinds of bodies and brains we have, given the biological, social, and cultural environments we inhabit, and given our basic human needs, the MIND AS BODY metaphor is a highly motivated structure that partly defines our purposes and also helps us achieve them.

# Experiential constraints and motivation

The embodied and imaginative character of our concepts has an important epistemological implication. It is anti-foundationalist in that it denies the existence of a pure universal reason, of absolute foundational concepts given a priori, and of any "pure" method for gaining knowledge. There is nothing necessary or a priori about the particular instantiations of the MIND AS BODY metaphorical system. They are not innate or built into the essence of some allegedly universal rationality. Rather, they are basic metaphorical structures for the kinds of embodied beings we happen to be, relative to the ongoing evolution of our capacities, and given the nature of our interactions with our physical and cultural environments.

Unfortunately, from this anti-absolutist stance, some people have tried to draw two invalid conclusions: (i) that there can be no cognitive universals, and (ii) that this leads to extreme forms of relativism and

subjectivism. Neither of these views follows, nor are they justified by the relevant empirical evidence. From the denial of pure reason and a priori principles, it does not follow that there are no universal structures of cognition/Given the nature of our bodies and brains, and given the kinds of physical and cultural interactions we engage in because of the kinds of interests and purposes we have, there may well be universal image schemas, metaphorical concepts, or cognitive structures. Whether there are such universals is an empirical issue. The cross-cultural studies that could identify such empirical universals have simply not been carried out extensively enough at the present time. So, we cannot make any strong assertion along these lines. Neither, however, can we deny their existence. We will only know the answer when we do the necessary cross-cultural research.

However, there is a growing body of evidence for the existence of conceptual metaphor as a general cognitive mechanism, and there is some cross-cultural evidence that suggests the possibility of universal metaphorical systems, such as MIND AS BODY. Image schemas (e.g., SOURCE-PATH-GOAL, BALANCE, COMPULSION, CENTER-PERIPHERY, SCALARITY, LINKS, CON-TAINMENT, etc.) are prime candidates for universal structures of experience, too. It is hard to imagine a human being without an up-down orientation within our gravitational field, or without some experience of bodily symmetry.

Whether certain conceptual metaphors, image schemas, or cognitive prototypes are universal, as I believe, awaits further study. But we have already discovered and analyzed enough cognitive structure to see that there are sufficient constraints on, and motivations for, meanings to avoid extreme forms of relativism. One need only examine Table 1 above to see some of the ways in which conceptual metaphors are motivated and constrained by the nature of our bodily experience. Metaphorical systems are not infinitely malleable and open-ended. For example, the UNDER-STANDING IS SEEING metaphorical system is a complex mapping of the structure and logic of the source domain onto the target domain. The ('logic') of the source domain is carried over into the logic of the target domain according to the following mapping:

Knowledge domain Visual domain → Idea/Concept Object seen → Understanding idea Seeing object Ambient light → "Light" of reason Visual focusing → Cognitive attention Visual acuity → Intellectual keenness Point of view → Intellectual perspective

The UNDERSTANDING IS SEEING metaphor, as an instance of the more general UNDERSTANDING IS PERCEIVING metaphorical system, is thus grounded and experientially constrained in at least three ways. First, the choice of vision as source domain and understanding as target domain is highly motivated by the nature of our visual experience. As Sweetser (1990) has observed, given the importance of vision for our ability to operate successfully within our environment, it is no accident that UNDER-STANDING IS SEEING should be such a major metaphorical system for our conception of knowledge. Second, the details of the mapping from source to target domains are quite specific and highly restricted by the nature of our visual experience. The metaphor has a very specific meaning and supports very specific inference patterns. Third, the kinds of metaphors we have for our mental or cognitive acts are limited by the nature of our bodies. The kinds of things we can do with our bodies, such as perceiving, moving, manipulating objects, eating, and procreating, determine the kinds of structure available as source domains for metaphors of cognition. While these bodily domains may not be the only possible source domains for metaphors of cognition, the MIND AS BODY metaphor stands out prominently across very different cultures and throughout history.

To sum up, neither a priori universalism nor radical relativism\_are supported by the empirical findings of cognitive semantics. There seem to be a reasonably small number of imaginative structures motivated by the nature of our bodies and brains in interaction with their developing physical and cultural environments. There is a great deal of constraining structure and experiential motivation, yet not to the extent that it closes off the creativity and flexibility that is necessary for us to transform meaning, solve problems, and co-evolve with our changing environment. This means that we would expect variation from culture to culture, as well as variation through history based on differing imaginative elaborations of shared image schemas. In short, for beings of the sort that we are at this point in our development, the way we understand and reason about things is highly constrained, yet there always exists a certain degree of indeterminacy, which is the basis for our ability to adapt to, and to transform, our situation.

### 2.4 Temporality

Image schemas are patterns of temporal processes. As bodily processes, these processes are neural, but our awareness of them as meaningful is based on our experience of bodily and social interactions. Because such processes take place over time, there is a temporal dimension to meaning, understanding, and knowledge, all of which tend to evolve over large

periods of time. This is a crucial ontological fact that is often ignored by objectivist metaphysics, which treats human subjectivity as either a substantial entity (i.e., a material or mental substance) or else as a static event structure. But human beings exist in and through time. Our subjectivity — our self-identity — emerges gradually over time, and is always in process. Therefore, whatever identity a person achieves is actually the continuity of experiences over time, whereby the "self" is formed and reformed in an ongoing, developing process.

What does this account of selfhood have to do with cognitive semantics? My thesis is that the developing "self" cannot be separated from the experiential process in which meaning emerges for us in our daily activities and projects (Johnson 1992b). Kant (1781) argued that subjectivity is the correlate of objectivity, that is, that a "subject" exists only in relation to its experience of objects. Similarly, I am suggesting that selfhood is the correlate of our construction of meaning, that is, that we have a self in relation to our experience of meaning. Semantic structure and content is a key part of the structure and content of our self-identity, in three crucial ways: (1) We are the kind of beings who experience things via certain kinds of imaginative structure, such as image schemas, prototypes, metonymies, and metaphors; (2) Our bodily experience determines the kinds of metaphoric source domains that define the content of our conceptual systems and the way we reason with them; (3) Details of our personal identity will depend on our personal history and the particular ways we imaginatively interpret our experience, such as particular metaphors we live by.

If this is correct, then we can get insight into how our self-identity is formed by exploring, as cognitive semantics does, the way in which meaning arises and develops in our experience, both synchronically and diachronically. Structures of meaning, such as image schemas, radial categories, prototypes, metaphors, and metonymies, are the imaginative dimensions of our selfhood. It is in this sense that we are fundamentally imaginative creatures. In order, therefore, to understand the formation and continual re-formation of the self, we must examine the way meaning emerges unconsciously in our bodily experience and becomes available for conscious reflection and transformation as we try to construct our

Cognitive semantics can thus give us insight into who we are in two crucial ways. First, it can show us how we are constituted by the traditions and institutions in which we find ourselves situated, and which set out for us possibilities for meaning and experience (Winter 1990). Second, it gives us insight into the way in which we constitute our selves through our modest freedom to imaginatively transform who we are at a given

moment. This is a semantic process, a matter of what can be meaningful to us, how that meaning emerges in our experience, and how it can be transformed over time.

There are both collective and individual aspects of our selfhood. Collectively, we all share certain bodily and cognitive capacities, we inhabit common cultural traditions (e.g., language, ritual practices, institutions), and we inherit cultural narratives by which we make sense of our lives. Yet, we are individual selves, too. We each have our own distinct bodies, our particular personal histories, and our unique interpersonal relations with other people. The "self" (or selves) we develop is, therefore, both collective and individual in character.

## 2.5 Social imagination

Human beings are irreducibly social creatures. This fact directly contradicts Enlightenment moral and political theories (such as those of Hobbes, Locke, and Kant) which provided the foundations for most of our contemporary theories of ethics, economics, and politics. We have inherited from the Enlightenment a mistaken picture of humans as isolated rational individuals who seek to maximize their well-being by the use of an "economic" (i.e., means-ends) rationality.

On this view, individuals need rational justifications (in terms of their self-interest) for entering into political states, which requires them to surrender some of the freedom they inherently possess as autonomous rational egos. This is a drastically impoverished conception of human nature which misses the fact that the self is formed in and through an ongoing social process. Since the self develops as a process in which meaning develops, and since meaning is primarily a social phenomenon, human subjectivity is social through and through. Even something as individual as my felt sense of a compelling physical force affecting my body gets part of the meaning it has for me by being situated within frames that I share with others.

The role of language in the formation of a person's identity is obvious. Cognitive semantics makes it possible to examine this formative process in a new way, by focusing on the imaginative dimensions of the constitution of the self. Because it recognizes the primacy in understanding and reasoning of various forms of imaginative structure (e.g., image schemas, metaphorical systems, metonymic projections, and prototype structure), cognitive semantics can begin to do justice to the public, social character of imagination (and, therefore, of selfhood).

The point is to see that reason and imagination are not two radically distinct capacities, but rather that our rationality is imaginative. Reason is broader than the Enlightenment supposed. It is not limited merely to logical form in the narrow sense of deductive structure. It includes metaphoric reasoning as well. Consequently, reason operates with a metaphoric logic of which classical logic and other traditional logics are but specific forms.

Once again, it is necessary to counteract the influence of Romanticism's tendency to stress genius, individuality, and spontaneity over the shared, social dimensions of imaginative activity. A fully elaborated theory of imagination would ultimately identify the social aspects of creativity generally, showing how creative acts draw on sedimented meanings, semantic frames, and prototypes that form the background for our understanding of a given situation. It would show how various kinds of imaginative structure allow us to extend and transform these semantic vesources. Far from being idiosyncratic and irrational, the different kinds of imaginative structure are as shared and social as any aspect of meaning, conceptualization, and reasoning.

This brings us back to our basic argument against more extreme forms of epistemological, metaphysical, and moral relativism. Cognitive semantics shows us a way to stop thinking of imaginative activity as private and idiosyncratic, and to see it, instead, as the chief means by which we are able to inhabit a shared world. Cognitive semantics gives empirical evidence to show what's wrong with the Enlightenment subjectivization of imagination and other aesthetic dimensions of cognition. It reveals communicable structures of imagination underlying our conceptual systems (Johnson 1987). It should also be noted that the very possibility of criticism rests on our imaginative ability to take up alternative perspectives on a given issue. The social character of our imagination is thus revealed by the fact that both our conceptual system and our reasoning about it have imaginative dimensions. Without a socially constituted imagination, therefore, we couldn't adopt different critical perspectives and criticism would be impossible (Johnson 1992b).

## 2.6 Morality

When most people think of linguistics, they are not likely to think of morality and politics. What connection, if any, could there be between syntax, semantics, and ethics? Many people don't see any. Moreover, the issues I have discussed so far, such as embodiment, imagination, constraints, temporality, and the social, may seem like topics only a philosopher could love - esoteric subjects far removed from the practical concerns of daily life and the concerns of working linguists. After all, who would think that a critique of objectivist views of language could

have any direct bearing on how we live our lives? Yet, I believe that cognitive semantics does have important implications for who we are and how we ought to live.

The key to discerning the relevant (moral implications is to focus on our nature as imaginative creatures, in the following way:

(1) Moral self-knowledge requires us to examine the imaginative structures that make up our moral understanding upon which our moral deliberations are based. Work on this subject from a cognitive semantics perspective has just begun. Krzeszowski (in press) has examined the way in which all image schemas involve values that emerge from the nature of our bodily makeup and experience. Lakoff (1991) has analyzed the central metaphors, folk models, and image schemas used by the Bush administration to defend its war in the Persian Gulf. I (Johnson 1992b) have given a systematic analysis of the metaphorical structure of our shared folk theory of morality in the western Judaeo-Christian tradition. I have also shown how our moral tradition assumes a view of concepts, meaning, and reasoning that is incompatible with recent results in cognitive semantics concerning the nature of human conceptualization. The primary metaphorical systems define our conception of the self as moral agent, our view of moral rights and duties, and our understanding of the moral evaluation of actions.

The self, for instance, is viewed as bifurcated into a higher, rational self that wars with our lower, bodily and passionate self. These two selves are oriented in an up-down fashion by a VERTICALITY schema, which is the basis for a number of metonymic and metaphoric elaborations of our self-identity Moral choice comes to be seen as the forceful control of our lower selves by our higher nature, (i.e., our rational will). Living a moral life is understood as a war between the two parts of our nature, and the precise character of this conflict is worked out according to metaphors of struggle, control, purity, stain, filth, and cleansing.

Our conceptions of action, duties, and rights are also defined by at least two extensive metaphorical systems. In the first system (the LOCATION system) actions are understood, via the EVENT STRUCTURE metaphor (Lakoff 1992) as motions along paths (based on the SOURCE-PATH-GOAL schema). Ends or purposes of actions are destinations along the actionpaths. Moral reason is a force that moves us along various action-paths (based on the COMPULSIVE FORCE schema). This entire cluster of metaphors rests ultimately on the SOURCE-PATH-GOAL schema and upon its elaboration via the PURPOSIVE ACTIVITY IS A JOURNEY metaphor, a special case of which is LIFE IS A JOURNEY.

As defined by these LOCATION metaphors, living a moral life becomes a journey toward a destination (a moral end or purpose). On this moral journey one must struggle with various literal and metaphorical obstacles that might keep one from reaching one's (moral) goal. Thus, duties are understood as highly constrained action-paths which the "force" of moral reason causes us to follow. Rights are metaphorical right-of-ways, that is, action-paths we are permitted to take without threat of hindrance from others who might present obstacles to our course of action.

In the second metaphorical system (the OBJECT system) actions or deeds are possessable objects (as in "I gave him a hit"). Having a right is having a letter of credit (an I.O.U.) that gives you access to a desired object, which is an action you can perform or a state you can be in. Where you have a right to such a desirable action-object, other people have a duty not to block your access to that object. They have a debt to you, which you have a right to collect on. They owe you whatever you have a right

A third massive metaphorical system uses metaphors of debt, payment, credit, and balance of transactions as a way of defining our moral expectations toward ourselves and other people. Actions are OBJECTS which have various metaphorical weights, where the weight is the moral worth or value of the action. The worth (or weight) of one action-object can balance out (based on a BALANCE schema) the worth of a different action-object. By our deeds (as valuable commodities) we accumulate moral credit (we are owed something for what we have done), or else we may work our way into moral debt (owing others for what they have done for us).

In western culture our sense of moral balance (fairness) is given a monetary interpretation, according to the MORAL INTERACTIONS ARE ECO-NOMIC TRANSACTIONS metaphor. Well-being is understood metaphorically as wealth. Increasing a person's well-being is thus increasing their wealth, so that they then come to "owe" you for what you have given them through your moral actions. Taub (1989) has identified a small number of basic schematic frames by which we understand the precise nature of these MORAL TRANSACTIONS, e.g., reciprocation, retribution, restitution, revenge, etc.

Working out the logic of our moral understanding would reveal its irreducibly metaphoric and imaginative character. This suggests that the first step toward moral self-knowledge is to grasp both the general imaginative nature of morality and also to explore the particular metaphorical systems that constitute our moral tradition. Cognitive semantics gives us a way to perform such an analysis.

(2) The second step is to become aware of the limits of our moral and political frameworks by taking up a critical stance toward their intrinsic pre-judgments and blindspots. For example, we need to learn

that the moral reason is a compelling force metaphor highlights only the restrictive and constraining aspects of our rationality, while it hides or downplays the imaginative and dialectical aspects of moral deliberation. Force of will and control over our passions are not the only, or even the most healthy and constructive, ways to conceive of our moral task.

Cognitive semantic analyses of our moral concepts and moral deliberation give us a new view of moral understanding. We need to go beyond the narrow view of morality as solely a matter maintaining a strong will, governed by reason, that can control our passions. Instead of viewing moral reasoning as the bringing of particular cases under pre-given moral laws, we should examine the more exploratory and creative side of moral deliberation in which we imaginatively try out various possible ways of framing and responding to problematic situations. Nussbaum (1990) has so far given the most comprehensive analysis of the central role of imagination in our moral deliberation.

(3) Finally, moral wisdom requires the ability to envision possibilities for more satisfactory, meaningful, and constructive forms of human relation, both in our personal relationships and in the structure of our moral and political institutions. Such acts of moral exploration and dramatic rehearsal of possibilities for action depend on our experience, sensitivity, and imagination. They are matters of what Aristotle called "practical wisdom", the ability to make the fine discriminations and the imaginative leaps necessary to manage conflict and to compose situations and relationships that enhance our possibilities for meaningful and constructive interaction (Nussbaum 1986).

While I am not claiming that cognitive linguistics will make you wise, I am claiming that its account of meaning reveals the tentative character of all our values, concepts, and institutions. It reminds us of their nonabsolute character and thus of the need for ongoing critical reflection and continual creativity in adapting them to new conditions. It shows us that there may be many ways of framing a particular situation, many possible moral systems that satisfactorily organize one's world, and therefore no single set of absolute moral concepts and laws. It ought to help us be more finely aware of our limitations and more understanding of alternative possibilities and points of view.

# 3. A summary — the form of the argument

I have been reflecting on some of the more significant philosophical implications of at least one version of cognitive semantics. The path from

meaning to concepts to reasoning to morality is not straight and clear, so it may be useful to summarize the overall structure of the kind of argument I have sketched above. Cognitive semantics has important philosophical consequences, I am claiming, because it shows us that our most fundamental philosophical concepts, and the reasoning we do with them, are embodied and imaginative in character. Meaning, metaphysics, and morality are all irreducibly metaphoric. The argument for this view would develop along the following lines:

(1) Reason is imaginative. From our most mundane decisions to our most sweeping life choices about relationships, career, morality, politics, and religion, we use our capacities for conceptualization and reasoning. Reasoning requires the application of concepts and frames to situations in order that we may draw inferences about them and act accordingly. Empirical findings from the cognitive sciences have given us a new picture of conceptual structure as imaginative (i.e., as involving prototype structure, basic level categorization, images schemas, and metaphors).

From cognitive semantics we have learned about the metaphorical and metonymic structuring of our conceptual systems and their grounding in bodily experience. Typically, we understand abstract concepts metaphorically by mappings of structure from source domains that primarily involve bodily interactions, such as perception, spatial and temporal orientation, manipulation of objects, and movement through space. We are beginning to work out the metaphoric mappings for such basic concepts as states, actions, properties, causation, purposes, means, difficulties, and agents (Lakoff 1992). Since concepts of this sort underlie the majority of our conceptual schemes, much of our understanding is metaphorical and metonymic.

- (2) The ontology of our concepts. The conceptual frames we use to understand situations have an implicit metaphysics. They specify, for instance, what is to count as an individual object, what counts as a property, whether there are essences, what space and time are like, and so forth. They specify both what entities exist and also what properties those entities have. This ontology is seldom a matter of conscious reflection and reasoning. Rather, it operates unconsciously for us in constituting our way of experiencing our world and dwelling within it.
- (3) Metaphysics as metaphor. At both the unconscious, automatic level of cognition and also at the level of reflective awareness, our access to the metaphysics of our conceptual frames is through image schemas and metaphorical systems. Moreover, we have learned that for any given situation, there are typically many possible schemes for understanding it. with each involving different relations of metaphors.
  - (4) Self-identity. Any schema or frame by which we understand a

situation thereby schematizes us. It tells us who we are in that situation, what role(s) we are playing, and what is possible for us. Ordinarily, our culture supplies and often imposes a set of frames for understanding situations and the kinds of roles we can take up within them. In this way, we have defined for us conceptions of who we are, who we might become, what roles we might adopt, and what we can do in a specific setting.

- (5) Partial schematization. No frame or conceptual scheme ever captures all of what and who we are at a given moment. Because they are metaphorical and imaginative, they will always be partial and open to change. They will highlight certain dimensions of a situation and of our corresponding identity, and they will thereby hide or downplay others. Hence, no metaphysics, either of the self or the world, is absolute and definitive. But neither is every schematization equally useful or adequate. Which ones work better than others is a matter of individual and collective self-critical experience over time.
- (6) The reflective dimension of cognitive linguistics. Metaphor analysis, and linguistics generally, needs to go beyond the ordinary practices of linguistics and other cognitive sciences. Besides the important work of studying the lexicon and the grammar, cognitive linguistics recognizes a further reflective task. By examining not just the cognitive architecture, but also the content and inferential structure of our schemas, concepts, and metaphor systems, we can discern their nature and limits — to see how they work, what they make possible, what they entail for our lives, and what they hide. Inquiry of this sort can help us understand how we may have identified with certain roles. It reveals how choices of frames and conceptual schemes may limit our understanding of who we are and what is possible in our lives. It can show us that no person is ever captured by any particular frame, metaphor system, or set of categories. Once we realize the existence of such partial schematizations, we may be able to entertain alternative conceptions of who we are and who we might become.
- (7) Cultural neuroses. Cognitive semantics, supported by other cognitive sciences, can reveal some of the sources of widespread cultural neuroses that have come to permeate all aspects of our society. Detailed semantic analyses can show us how such neurotic frames have arisen, why they have such a strong hold on us, and the ways in which they are harmful to our personal and communal well-being.

For example, as I mentioned earlier, our common moral understanding consists of folk theories about the nature of the self, human psychology, reason, will, laws, and so forth (Johnson 1992b). These folk theories, and most of the key concepts within them, are defined by metaphors. In our culture, we have inherited a picture of a radically split self, consisting of the disembodied, rational part that stands over against the embodied, emotional and passionate part. The "higher" rational self seeks control over the "lower" bodily self. Acting morally is discovering and applying absolute moral laws to concrete situations. People are believed to possess a radically free will, which allows them to negate any needs, inclinations, or desires that might issue from their bodily part, and to follow moral laws that tell us how to act.

There is very little that is psychologically, epistemologically, or ontologically realistic about this received view of morality (Flanagan 1991). Consequently, our acceptance of it leads us into all sorts of neurotic expectations and behavior. It creates, for instance, the false belief that for any situation there is always one single right course of action, and that anyone using their reason correctly could and should be able to figure out what that is. It creates the illusion that we are radically free, that we are the sole cause of our actions, and that we can and should be held totally responsible for what we do. It fools us into thinking that morality is a matter of rational analysis and logic, and that it does not in any substantial way depend on imagination, emotion, or aesthetic dimensions of experience.

Trying to act on all of these badly mistaken assumptions almost guarantees neurotic behavior, guilt, feelings of severe inadequacy, and overwhelming pressure to be what you are not. The role of cognitive semantics in all of this ought to be analytic. That is, it gives us the techniques for understanding the structure of our moral understanding and reasoning. It lets us see what our assumptions are, how they hang together (or fail to), what they entail for our sense of morality, and what problems they may create for us.

(8) Morality. The argument as I have outlined it leads to the following momentous conclusion about ethics: In many situations there may not be any one course of action that is the single "right thing to do". There is often no unique right action dictated by a presumed "essential rational nature". Instead, there will be a range of possible actions set out within our cultures which must be composed by us into a more or less coherent course of action. There are a multiplicity of moralities by which people can reasonably live. Morality is primarily a matter of cultivated moral imagination. It often involves envisioning new possibilities for self-identity, relationships, institutions, communities, and conceptions of our relation to our environment.

Such a view does not exclude the possibility of universal moral ideals. Given the kinds of bodies and brains we have, given common purposes we have as human animals, given various universal prototypical experiences of harm, help, charity, and caring, and given the possibility of shared experiences of human flourishing, there may well be universals. Whether there are or not is a question for empirical study, and cognitive semantics can play a role in cross-cultural studies.

It must always be remembered, however, that the fundamentally imaginative character of human cognition is likely to give rise to culturally specific interpretations of even the most universally shared values and experiences. In light of the imaginative character of moral reasoning, one possible conception of moral principles is that they are not absolute technical rules for living, but rather summaries of a culture's experiments with ways of living and ways of treating other people. Such principles are not dictates of a universal practical reason, but rather imaginative moral ideas grounded in our evolving collective moral experience.

(9) Cognitive semantics as philosophy. What began rather modestly as linguistic inquiry can lead us to morality, politics, and decisions of the gravest human import. I have only gestured toward the vague outline of an argument that would lead us along this difficult path from language to concepts to meaning to selfhood to morality. I do not pretend that this is the only proper conception of cognitive semantics. Nor do I suppose that I have glimpsed the only possible philosophical assumptions and implications. But I am claiming that cognitive semantics requires us to challenge certain traditional philosophical conceptions, among which are deeply-rooted conceptions of concepts, meaning, selfhood, and ethics.

Cognitive semantics cannot guarantee to make us wiser, but it can make us vastly more knowledgeable about what it means to be a human being, about who we are in the process of becoming, and about some of the possibilities for growth that are open to us. If nothing else, it ought to make us more humble by revealing the imaginative nature of our concepts and reason. That, in itself, would be a monumental contribution.

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#### References

Churchland, Patricia

Epistemology in the age of neuroscience. Journal of Philosophy 84(10), 1987

Churchland, Paul

Scientific Realism and the Plasticity of Mind. Cambridge: Cambridge Uni-1979

Flanagan, Owen

Varieties of Moral Personality. Cambridge, MA: Harvard University Press. 1991

Gadamer, Hans Georg

1975 Truth and Method. London: Sheed and Ward.

Geeraerts, Dirk

1990 Editorial statement. Cognitive Linguistics 1(1), 1-3.

Johnson, Mark

1987 The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason. Chicago: University of Chicago Press.

1992a Incarnate mind. In Galbraith, Mary and Rapaport, William (eds.). Where Does 'I' Come From? Kluwer, in press.

1992b Moral Imagination: Implications of Cognitive Science for Moral Understanding. Chicago: University of Chicago Press.

Kant, Immanuel

1781 [1968] Critique of Pure Reason. Translated by Norman Kemp Smith. New York: St. Martin's.

Krzeszowski, Tomasz

in press The axiological parameter in preconceptual image schemata. In Geiger, Richard and Rudzka-Ostyn, Brygida (eds.). Conceptualizations and Mental Processing in Language. Berlin/New York: Mouton de Gruyter.

Lakoff, George

1987 Women, Fire, and Dangerous Things: What Categories Reveal About the Mind. Chicago: University of Chicago Press.

The metaphorical system used to justify the war in the gulf. Department of Linguistics, University of California, Berkeley.

1992 The contemporary theory of metaphor. In Ortony, Andrew (ed.), *Metaphor and Thought*. Cambridge: Cambridge University Press, 2nd ed.

Nussbaum, Martha

1986 The Fragility of Goodness: Luck and Ethics in Greek Tragedy and Philosophy. Cambridge: Cambridge University Press.

1990 Love's Knowledge: Essays on Philosophy and Literature. Oxford: Oxford University Press.

Ricoeur, Paul

1977 The Rule of Metaphor. Translated by Robert Czerny. Toronto: University of Toronto Press.

Sweetser, Eve

1990 From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure. Cambridge: Cambridge University Press.

Talmy, Leonard

1988 Force dynamics in language and cognition. *Cognitive Semantics* 2, 49–100.

Taub, Sarah

1989 An account of accounting. Unpublished ms., Department of Linguistics, University of California, Berkeley.

Winter, Steven

Bull Durham and the uses of theory. Stanford Law Review 42(3), 639–693.

# The grammaticization of the Japanese verbs *oku* and *shimau*<sup>1</sup>

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#### Abstract

Japanese exhibits several grammaticized uses of two verbs oku 'to put down/keep' and shimau 'to put (something) away/finish': oku as a marker for preparative/purpose, perfect and volitional, and shimau as a marker for frustrative, perfect and non-volitional/evidential. These grammaticized uses nicely reflect the lexical meaning of the two verbs, and thus retain the same minimal-pair-like contrasts as seen in the lexical verbs. This grammaticization was realized through grouping verbs together in a clause-linking construction: one of the verbs in the construction loses its clear lexical meaning and acquires some grammaticized uses. The phonological form of the grammaticized uses of the two verbs also indicates their grammaticized status. The semantics of both the lexical verbs and the grammaticized uses suggest a particular direction for the development of the several different grammaticized uses of the two verbs.

Diachronic consideration reveals that Japanese used to have two kinds of perfect markers -tsu and -nu which appear to have had very similar functions to the grammaticized uses of oku and shimau. This older pair also evolved from lexical verbs through the same type of clause-linking constructions thus suggesting the linguistic cycle, in which a language keeps re-inventing grammatical forms which serve the same types of functions through the same types of resources.

#### 0. Introduction

In a recent paper, Genetti (1986) discusses grammaticized uses of two Newari verbs tql- 'to put/keep' and dhun(-k)- 'to finish'. Each of these two verbs has developed several grammaticized functions which contrast subtly with the grammaticized functions of the other verb: tql- as a marker for benefactive/purpose, perfect and evidential, and dhun(-k)- as