C:\EKD\METAPHOR\WARDVOL.WPD January 8, 1996,

Of "Men" and Metaphors: Shakespeare, Embodiment, and Filing Cabinets

531. We speak of understanding a sentence in the sense in which it can be replaced by another which says the same; but also in the sense in which it cannot be replaced by any other. . . 532. Then has "understanding" two different meanings here?—I would rather say that these kinds of use of "understanding" make up its meaning, make up my *concept* of understanding.

Wittgenstein, *Philosophical Investigations*.

Murderer: We are men, my liege.

Macbeth: Ay, in the catalogue ye go for men;
As hounds, and greyhound, mongrels, spaniel curs,
Shoughs, water-rugs, and demi-wolves are clept
All by the name of dogs; the valu'd file
Distinguishes the swift, the slow the subtle,
The house-keeper, the hunter, every one
According to the gift which bounteous nature
Hath in him clos'd; whereby he does receive
Particular addition, from the bill
That writes them all alike: and so of men.
Now, if you have a situation in the file,
And not I' the worst rank of manhood, say it;
Shakespeare, Macbeth, Act III, Scene I.

1. Introduction

When Wittgenstein speaks of "understanding" a sentence both in the sense that a sentence can replace another and in the sense that it cannot, he directs us to the importance of *articulation* in language and thought. By articulation, I mean the deployment of categories and conceptual schemes to mark distinctions and relations among our experiences, to sort out those experiences and to see the world as "jointed." To articulate our experience is to attempt to "cut the world at its joints," or to construct categories in a fashion that facilitates our goals and projects. The underlying conceptual structure of literal-conventional languageSee Kittay (1987, pp. 50-55) for a discussion of the need to speak of literal-conventional language, rather than just literal language in speaking of everyday language that we do not think of as figurative.

reflects the way convention and current knowledge (the two are not always synchronized)

individuates objects and categories and sees the world as jointed.

To understand a sentence in Wittgenstein's first sense, in the sense in which it can be replaced by another sentence, is to see language as describing states of affairs through the use of labels, which are arbitrarily attached to concepts and are replaceable by another set of labels. Such a conception of language and its relation to thought is necessary if we want to explain the intertranslatability of the following sentences, for example: "Je vais à Paris," "Ich gehe zu Paris," "I go to Paris," and "I am going to Paris." If expressions were never interchangeable, either intraor inter-linguistically, communication would be seriously hampered. Our continual ability to produce novel sentences creates a superfluity of creativity, against which the translatability of sentences is a bulwark, without which communication would otherwise be unstable. Understanding a sentence in Wittgenstein's second sense, that is, in the sense in which a sentence cannot be replaced by another, is a function of the way linguistic novelty and creativity both spurs and reflects novelty and creativity in thought. Figurative language, poetic language, and most especially metaphor, is our springboard to thoughts not captured in conventional and literal articulations. When we are creative, we either exploit conventional conceptualizations but push them in new directions, or we look to break out of their constraints by finding alternative organizations of our concepts. In the first case, we look at implications of the present conceptualization that will lead us to new knowledge or insight. In the second case, we create new categories, and new relations among those concepts and categories that we normally accept. Researchers have noticed how difficult it is to get people to think in *radically different* terms. Tom Ward (1994) found that when he asked students to draw creatures from another galaxy, they retained properties of humans: bilateral symmetry, sense organs, appendages, etc. Cristina

Cacciari *et al* (this volume) confirmed that even children, who we presume are more creative than adults and whose categorical boundaries we assume are more fluid, did not exhibit more creativity in this respect. They did manifest more creativity when language, rather than drawings, was the medium used. See Cacciari *et al* (this volume).

These researchers point out that failure to get results that depart radically from the established knowledge base is "consistent with that current in recent creativity literature that stresses the similarity of creative and noncreative forms of cognition." (Cacciari, this volume, p.00.)

Both Sam Gluckberg *et al* and Ray Gibbs propose creative linguistic and conceptual strategies that depend on the same forms of cognition upon which we rely to communicate in ordinary everyday language. For the most part, these forms of cognition depend on the first aspect of Wittgenstein's sense of understanding, the paraphrasability of sentences. Most of what we communicate in everyday language could be said in different words. But the studies of both Gluckberg *et al* and Gibbs are about metaphor. If a metaphor has cognitive importance, that is, if it contributes to genuine creativity in thought and language, it is not a mere linguistic frill. In that case, understanding the metaphorical sentence will necessitate understanding how no other words will express exactly what the metaphorical expression conveys.

The question then is how these two aspects of understanding are connected and if, by looking at the first use of language, we can come to understand the creativity in the second. Metaphors may be a useful link, for although metaphor is more than a linguistic embellishment, not all metaphorical sentences are instances of creative language incapable of literal paraphrase.

Consider Glucksberg et al's examples:

1a. His car was a lemon.

- 1b. My job is a jail.
- 1c. My surgeon was a butcher.
- 1d. My butcher is a real surgeon!
- 1e. New York may well become the next Orange County.
- 1f. Our love has become a filing cabinet.

All but 1e and 1f are fairly common and transparent metaphors. All but 1f is easily paraphrased (assuming that you know something about the fiscal disaster that Orange County, California experienced). And if 1f is hard to paraphrase, it is also hard to understand. The first example is more a cliché than a metaphor. We hardly need to know much about lemons to know that it could be paraphrased as

1a'. His car is constantly breaking down.

But even such banal metaphors lose something in translation. 1a also expresses the thought that he who owns the vehicle has *soured* on it: that its owner would want to get be rid of it, just as one would like to get rid of a sour taste in one's mouth. 1a' does not carry the same implications. The owner of a car that frequently breaks down might relish fixing cars. 1a is a metaphor, not entirely paraphrasable, but also not particularly creative. It is the ability to use words in this ordinary, but metaphorical way which both Gluckberg *et al* and Gibbs see as the nub of a certain form of creative use of language.

While Glucksberg *et al* draws our attention to the ordinary metaphors such as 1a-d, Gibbs adjures us to look at the creative use of language in the works of exceptional talents such as Shakespeare. Creative artists such as Shakespeare, claims Gibbs, drawn on "image schemas" which arise as a result of recurrent and shared bodily experience (Gibbs, this volume, p. 4).

Their creativity derives from their ability to elaborate on common metaphorical projections based upon such bodily image schemas. Our ability to make sense of these creative uses of language depends on our shared bodily experience, by which we too engage in these metaphorical projections. He writes:

The fact that we, as ordinary readers and observers, have similar metaphorical understandings of many abstract concepts, ones that arise from our own embodied experience, allows us to make sense of creative works such as that seen in the language employed in *Hamlet* (Gibbs, this volume, p. 4).

Using another example, Gibbs claims that Neruda's metaphors for love in *Ode and Burgeonings*, although very poetic and inventive, conform to a metaphorical conceptualization, love is a journey, which is common in our language. Love is a journey, is, in turn, a metaphor based on the image schema: source-path-goal. Neruda's haunting images are only the more glorious cousins of a plain Jane metaphor such as "I'll go wherever love leads me." The most poetically creative metaphors, claims Gibbs, can be traced to mundane, common metaphorical projections of bodily-based conceptions that we store as image schemas.

Glucksberg *et al* trace the creative processes back not to common bodily-based image schemas, but to a process of category formation that puts exemplars at the center of concept formation. Heeding Gibbs's call to look to Shakespeare if we want to understand creativity in language, let's consider the question Macbeth poses to the men he hires to murder Banquo. Echoing the question that Lady Macbeth throws up to him (*Act Sc.*), Macbeth asks: "Are ye men?" Understood literally, it is odd to face an identifiable fellow human creature and ask, "Are you a man?" As the dialogue makes clear, the question is not about routine naming. Hounds,

greyhounds, mongrels, spaniel curs, shoughs, water-rugs, and demi-wolves are all called "dog," says Macbeth, but this common name does nothing to distinguish among the dogs. "Dog" in this sense is a "bill that writes them all alike." Macbeth asks the murders if they are "men enough" to do *the deed*. With that question he hopes to tie their commitment to the deed to any pride they may have in their manliness.

Macbeth's is a question about *exemplification*, about that "particular addition" that distinguishes each member of a category from the others, that ranks members, and that gives to a few the privileged appellation. And so Shakespeare instantiates a "best-example" model of the exemplar theory of concepts (Smith and Medin, 1981, p. 147). The question for theories of concept formation based on exemplars is, "How does one subset or instance of a category come to define in people's mind, a category in which the other subsets or instances vary?" (Smith and Medin, 1981, p. 147). For Shakespeare, the "best example" is not the typical, but the most *distinguished* as it approaches an ideal (even if the distinction Macbeth seeks is the capacity to be brutal in the pursuit of an ambition).

That categories are sometimes identifiable through exemplars provides insight into how metaphors can be a case of category formation or class inclusion, and how, as a "limiting case of category formation," metaphors participate in an activity that pervades cognition (Kittay, 1982; Glucksberg and Keysar, 1990). At the same time, viewing metaphors as a case of category formation also allows us to understand how metaphors do not merely register pre-existing similarities, but how they *create* similarities. The canonical statement that metaphors are based on pre-existing similarities but are the source of new similarity judgments is Max Black's: "It would be more illuminating in some of these cases to say that the metaphor creates the similarity rather

than records a similarity antecedently existing" (Black, 1954, p. 37).

The theory of metaphor as a class-inclusion statement does for Glucksberg *et al* what the theory of metaphor as an extension of image schemas does for Gibbs: connect the more innovative and creative use of language captured in the poetic metaphor (or the scientific analogy based on metaphor) to more ordinary and mundane forms of cognition. In this way, both succeed in presenting theories that allow us to see how the creative use of language and thought (which is metaphor at its best) is at once distinct from and continuous with the ordinary use of language. The task that remains for us in this paper is to evaluate these theories in terms of their capacity to account for the creative contribution of metaphor to language and thought.

2. "Men" and Filing Cabinets: Metaphor as Creative Categorization "The Paradox of Unlike Things"

Metaphorical statements using the verb "to be", understood literally, are either false or meaningless. Literally speaking, cars are not lemons, nor can love be or become a filing cabinet. Some of these infelicities can be described as category mistakes, that is, predications or assertions that cannot logically be made of the subject in question (Ryle, 1949). Jobs are activities; jails, in contrast, are institutions or entities. Filing cabinets are inanimate entities, while love is a relationship, emotion, or person. We can neither literally predicate "love" of filing cabinets nor "being a filing cabinet" of love. Some of the examples of Glucksberg et al are not semantic or logical anomalies but are pragmatically or empirically odd. Hypothetically, one individual could be both butcher and surgeon (in some historical times the same person may well have been both butcher and surgeon). But today no one would hold both positions. 'New York' and 'Orange County' are both American municipalities, but since they are different

municipalities, it is just false to say that New York is or could become Orange County.

As these nominal metaphors are false or meaningless as identifications (understood literally), how do we make sense of them as metaphors? The suggestion is that we understand them as classifications. "His car is a lemon" is a metaphorical classification in which "lemon" names a category which subsumes "his car," just as "A dog is an animal" is a literal classification in which "dog" is subsumed under the classification "animal." Glucksberg *et al* point out that we can transform statements 1a-f into statements using the comparative form, but that we cannot do so with literal comparative statements. We can say, "His car is a lemon" or "His car is *like* a lemon." The *like* changes little. In contrast, Glucksberg *et al* offers examples of literal comparisons 2a-c.

- 2a. Copper is like tin.
- 2b. Coffee is like tea.
- 2c. Limes are like lemons.
- *3a. Copper is tin.
- *3b. Coffee is tea.
- *3c. Limes are lemons

Because it appears paradoxical that things that are so unalike as lemons and cars can more easily be identified using the copula than lemons and something as similar as limes, Glucksberg *et al* speak of "the paradox of unlike things compared."

The interchangeability of "is" and "is like" that we find in the case of metaphorical but not in the case of literal statements is a useful criterion for assessing whether a comparison is meant metaphorically or literally. It has a paradoxical air, but it is not really a paradox. From a logical

perspective, if x is literally identical to y, then x is also like y, namely x is like y is *all* respects. From a pragmatic perspective, if we mean to say that x *is* y, then we don't *say* x is *like* y. In literal speech, we differentiate "is" and "is like", using the latter to make comparisons that fall short of identity.

Still Glucksberg *et al* are right to say that metaphorical identifications are not identifications at all. Furthermore, the comparative form "is like" is not a literal comparison either; instead, the "like" is itself metaphorical (Kittay, 1995). The "like" is metaphorical because the comparison is not only between two "unlike" things, but because the things are unlike in a particular way, and once we recognize this, we can explain away the paradox. In the case of literal comparisons, the objects compared share a conceptual space within an established and conventionalized conceptual scheme. Within that space they are differentiated. In the case of metaphorical comparisons, the objects compared do not share a settled conceptual space, and it is in this regard that they are unalike. They are unlike in that they occupy positions in two distinct conceptual domains— or at least in two domains (or semantic fields) that are being differentiated for the purposes of the discussion at hand. Within each domain, however, they occupy the same *role*. That is what makes it possible to drop the "like" and assert a metaphorical identity. But in asserting the metaphorical identity, a classificatory statement is implied. For what is being identified cannot truly be identified.

The earlier talk of category violations and metaphor indicated that when we have a category violation, the terms of the predication do not sit within a conceptual space shared by the subject of the predication. For example, "lemon" and "car" share no immediate superordinate categories; they sit in different conceptual fields. However, within a conceptual space of cars, the

car identified is "in the worst rank" of cars (with respect to reliability), and among fruit, lemons are "in the worst rank" of fruits (with respect to sweetness and pleasant taste). Their identity is established relative to their place in their usual conceptual domain. In the process, the vehicle, "lemon" comes to stand for the newly created category, which also becomes a newly shared conceptual space for the car and the fruit.

Metaphorical sentences such as 1c-e require a somewhat different analysis since pragmatic, rather than semantic or logical, violations are at stake. "Butcher" and "surgeon" are found in different domains because of empirical considerations. "New York" and "Orange County" may be said to share a conceptual space, since they share a superordinate term, American counties. The metaphor depends, however, not on their commonality as local municipalities, but on the distinctive feature of Orange County as a municipality that has gone bankrupt—a circumstance we expect of individuals or corporations, but not governments.

This analysis of metaphorical sentences 1c-e throws new light on the anomalous examples 3a-c. Through contextual clues, the entities compared can be understood to belong to two distinct conceptual domains, even though they are usually classified as belonging to the same domain. For example, although coffee and tea are similar in that they are both caffeinated beverages often served hot and sometimes served iced, in confirmed tea-drinking nations, there is all the difference between tea and coffee. So much so that, if we are in a tea-drinking country such as Ireland, we can say of coffee-loving Swedes:

4a.Coffee is the tea of Swedes.

Likewise, in spite of the closeness of lemons and limes in the category of citrus fruit, we can say:

4b. Limes are the lemons of South American Cuisine.

In these sentences, two distinct semantic fields are invoked through which the otherwise similar things are distinguished, as being in different domains for the purposes of the discussion at hand. But the identification and the comparison are figurative in that they do not take place within the classificatory scheme that governs the literal and conventional understanding of these terms. A figurative classification *cum* identification is made across the distinct semantic fields. In saying that "limes are the lemons of South America" or that "coffee is the tea of the Swedes," we are creating both a new distinction and a new set of similarities between the entities compared. The new distinction is in terms of conceptual domains: tea and coffee are not classified by virtue of their properties as beverages, but as drinks with certain distinctive roles within different cultures: tea in this context is an Irish sort of thing while coffee is a Swedish sort of thing. In any culture in which tea predominates, coffee is not a replaceable beverage even if it too contains caffeine and is a hot liquid. In comparing the two, I privilege tea as the drink that is the exemplar of a beverage with which we wake up in the morning, refresh ourselves in late afternoon, and finish our meals at all times of day. As a tea drinker, I can understand the analogous role that coffee plays in another culture, however. So in constructing my metaphor, I do two things at once: 1) I locate an analogous role for coffee and tea in two distinguishable domains, and so create an identity across domains; and 2) I privilege one, the one that is within the domain that functions as the perspective from which I regard the practice of the other, and so create a new category, one in which tea and coffee co-exist, but on different terms than those that makes 3b anomalous.

Dual Reference

When the metaphoric vehicle is used as both an exemplar and as an (ad hoc) name for a category,

Glucksberg *et al* call this linguistic move "dual reference." Such dual reference is characteristic of metaphor, but not of literal identification statements. A similar idea was expressed by Samuel Johnson, (later cited and adopted by I. A. Richards (Richards, 1936)) that in metaphor, we have "two ideas in one." Paul Henle (Henle, 1965, p.178) spoke of metaphor as characterized by a "double sort of semantic relation." Henle spoke of the vehicle as an icon in the Peirceian sense (Peirce, 1931, p.247ff). What he meant was, I believe, very close to the idea that the vehicle forms an *ad hoc* category by being an exemplar of that very category. In my own work, I consider it criterial that a metaphor have a double semantic content (Kittay, 1987). On my view, a metaphor is a complex sign in which the sense of the vehicle becomes the mode of expression for the topic.

What Glucksberg *et al* mean when they speak of dual reference is, I believe, a useful refinement of the view that metaphorically used terms carry a double semantic content. They spell out how the dual reference serves to metaphorically redescribe the topic. The vehicle term carries its usual meaning, or rather one of its usual meanings, that meaning that places it in a category which is delimited by the topic in a specific way: "a metaphor topic provides potentially relevant dimensions for attribution, but not their specific values" (Glucksberg *et al*, this volume, p.16?). But at the same time, the vehicle also serves as the name of an *ad hoc* category by which the topic is newly classified, so the metaphor vehicles: "are used to refer to the attributive categories that provide candidate properties to be attributed to a metaphor topic" (Glucksberg *et al*, this volume, p.00?). Topics, then, provide conditions constraining which properties of the vehicle will be considered as properties to be metaphorically attributed to the topic. Those are the properties that can be specific values of an attributive category pertinent to the topic. So in the

case of the topic "surgeon" we know that surgeons are more or less skilled, and of any particular surgeon we may not know just how skilled or unskilled she is. A vehicle that belongs to some attributive category, say skill, in which it exemplify a property, say incompetence or sloppy performance, would have this property singled out as relevant.

An Argument Against Feature Matching

Glucksberg *et al* argue that the thesis that the topic and vehicle are mutually constraining, provides grounds for experiments, the results of which argue against a feature-matching approach to metaphor interpretation. A feature-matching approach has a virtue, namely, the mechanism by which we come to think about one thing in terms of another, is easily modeled computationally. The computational model more conducive to Glucksberg *et al*'s approach is probably a mutual constraint model (e.g. Thagard *et al*, 1990, or Steinhart, 1995) which captures the interactivity that Glucksberg *et al* describe.

The feature-matching approach to metaphor has its own set of constraints that are lost when the approach is divorced from the relational account of which it is a part. In a relational account of metaphor, a metaphor term is always part of a system or theory which is delimited by the system or theory to which the topic belongs. The system or theory to which the topic belongs will normally serve as a constraint on the features of the topic and vehicle that would be matched. Nonetheless, a mutual constraint model may have processing advantages (Steinhart, 1995).

The View of Metaphors as Ad Hoc Categories and a Relational Theory of Metaphor

If I have correctly characterized of the position of Glucksberg et al, then the view of their view is compatible with the relational modelsBy relational models I mean those which claim that metaphoric transfers involve a transfer of relational structures across domains. The work of Max

Black (Black, 1954) and Nelson Goodman (Goodman, 1968), Dedre Gentner and her associates, (e.g., Gentner, 1983, and Gentner, this volume), my own work and that of my collaborator Eric Steinhart (Steinhart and Kittay, 1994), and even some of work the cognitive semanticists, including Gibbs could be characterized as using a relational model of metaphoric meaning. In the discussion, I will only make the case that Glucksberg et al's views are compatible with my own. of metaphoric transference. To say that those properties (understood as values of dimensions of attribution) contributed by the vehicle to the topic are constrained by potentially relevant dimensions for attribution designated by the topic can be made compatible with the idea that metaphors are transfers of relations across semantic fields. We just need to say that the dimensions of attribution are the contrasts and affinities which partially define a term, and which locate a term within a conceptual domain. When a term is metaphorically assigned a property, its relation to other terms in its field is specified by reference to the relation of the topic's place in its field. So, for example, if I want to describe the skill level of a surgeon who has seriously bungled an operation, I may want to place him off the scale of the normal value of skill needed by a surgeon. To extend the value of the dimension of that attribution, I look to another field of activity in which cutting flesh takes place but in which the degree of precision in cutting needed by the surgeon is irrelevant—that is, to butchering. I import a set of values to the original field which extends it and allows me to fully characterize my incompetent surgeon. Descriptions of metaphoric processing such as this one are characterized as a temporal process and these have run into objections (Gibbs, 1994) from those claiming that time studies indicate that most metaphoric processing occurs as quickly as the processing of literal language. The timed studies also indicate that mappings that are not usual or conventional do take more time to process,

particularly when an extensive context is not provided (Gibbs, 1994, 100). Conventional metaphors and novel mappings may indeed involve different *actual* processing strategies. But at the same time, their logical and conceptual properties may be the same, and describable in the two step manner in which both Glucksberg *et al* and I tend to speak.

When a field is so extended, a plethora of other locutions becomes available to a speaker. In this instance, I can also say:

- 5a. The surgeon butchered his patient
- 5b. The surgeon hacked way at his patient
- 5c. This surgeon was better suited for the carnage house than the operating room
- 5d. These awful scars were inflicted by a butcher, not a doctor

And so on.

If we can characterize what happens in terms of attributes, properties, and the category membership of individual terms, why should we burden ourselves with the more cumbersome notion of semantic fields, relationships between terms, and conceptual domains? Consider sentences 5a-d. They illustrate how metaphors are easily extended, both in terms of the implications that are a consequence of a particular nominal metaphor, and in terms of using the various grammatical resources of a semantic field. If a surgeon is a butcher, then what this surgeon does is not "operate on", but "butcher" his patients; the place he works is no longer an operating room but a "house of carnage"; he no longer "makes incisions," he "hacks away at his subject," etc. Glucksberg *et al* advance our understanding of how, through the double semantic move, *ad hoc* categories are provided when using metaphor. But their concentration on particular terms and isolated categories fails to explain this sort of productivity of metaphors. The semantic

field approach and the approach employed by Gibbs both give us a way to think about this form of productivity. The creativity of metaphor lies both in its productivity and its ability to generate new categories. Metaphor allows us to push the boundaries of language by expanding the expressive possibilities of language and of thought and by offering different ways of arranging concepts, and of drawing new relations between categories.

There is another related difficulty with the dual reference model. As Glucksberg *et al* point out, the dual reference of using an exemplar as a category name occurs when we speak of tissues as Kleenex, a copy as a Xerox, etc. While the similarity is instructive, it is also important to see how the cases are different. If one didn't know that Xerox, although used generically, is a brand name, nothing that we communicate by its use would be lost. But if we only know that "butcher" can refer to someone who bungles a job, we lose the metaphoricity of sentences such as 1c-d. Nor would we extend the metaphor in the ways suggested in sentences 5a-d above. This difference, I suggest, is a difference between run-of-the-mill polysemy and metaphor. Because we know what a butcher is, what he does, where he does it, and how this job fits into a set of other activities and professions, we can understand the sentence as a metaphor and deploy the larger semantic field to which the term belongs. We extend the range and possible perceptions of surgery, reorder the field and its activities in light of the juxtaposition of butchery and surgery.

The conflation of a brand name with the category to which the object with the brand name belongs is, on the other hand, fairly uninteresting conceptually because that use of an exemplar as a category name does nothing to disrupt the conceptual organization to which the relevant categories belong. When Xerox Corporation brought out their copiers, they flooded the market

with a machine that may or may not have been the first photocopying instrument of its kind, but "Xerox" became the name of a category whose introduction into the language was matched by an introduction of a new *thing* into our lives: the photocopier. When I call my surgeon a butcher, or call a paintbrush a pump (Schön, 1979), or love a filing cabinet, the category that is formed thereby describes not a new thing, but a new *view* of things.

Creation of a New Category

New categories are created, then, in one of two ways: either an invention or discovery not already covered by our classificatory scheme will necessitate the introduction of a new concept (e.g. the carburetor, the HIV virus, the computer, etc.); or a new category may arise which depends on no new inventions, no additions to what already is, but resorts to what already exists. The latter can take place either when an existing category is extended to include instances that substantially alter the category (e.g., harassment extended to include unwanted sexual encounters) or when a category is newly introduced without an new objective corollary being introduced (e.g., the Freudian unconscious, which reconfigures the relations between conscious and nonconscious mental states). Metaphorically created categories are of the latter sort. Categorical statements are implicitly similarity statements since all members of a category are so classified because of some salient similarity. Yet if metaphors do not report an antecedent similarity, but instead create the similarity, they do so by dislodging some items from familiar classifications and regrouping them with items that normally belong to different, even disjoint categories. So dislodging and regrouping items or subclassifications not only creates a new category, but disrupts normal classifications.

Let us take a non-metaphorical example to begin with. Consider the idea of "marital rape." This

notion is an extension of the notion of rape, which has as its paradigm coerced sex by a someone (usually a stranger) with whom the rape victim has never consented to have sexual relations.

Since marriage is a situation in which both partners have already consented to have sexual relations, it is, at first, unclear how a husband can "rape" a wife. By understanding that consensual sex means consent to *each* sexual encounter, we revise the notion of rape, and the notion of marriage, so that we can speak of rape within marriage. This is a nonmetaphorical extension (even creation) of meaning because, once reconceived, the new categories are stable. Marriage means many things besides unrestrained sexual access to a partner, and sexual encounters are individuated occurrences. One comes to understand that consent on *one* occasion does not mean consent on *any* occasion. The meaning of marriage might shift, but the shift is stable.

Contrast this with a metaphoric classification. A group of researchers were attempting to create a paintbrush using synthetic bristles. They were unsuccessful in creating one that would apply paint as evenly as natural bristles until one researcher remarked, "a paintbrush is a pump." The researcher realized that "when a paintbrush is pressed against a surface, paint is forced through the *spaces between bristles* onto the surface" (Schön, 1979, p. 257) as if the liquid were being pumped. Natural bristles formed a smooth curves through which the liquid flows; in contrast, the synthetic bristles bent at an angle. The insight that "a paintbrush is a pump" enabled the team to devise a synthetic brush that would curve when pressed to a surface, and so allow for the smooth pumping action characteristic of natural bristles.

This is a fine example of the creative turn of mind that metaphoric thinking and metaphoric classification permits. Yet in spite of the productivity of this metaphor, we do not revise our

usual classificatory scheme: we do not henceforth speak of paintbrushes and pumps as if they were one sort of thing. For the purposes of solving the problem at hand, the properties associated with pumps were tested on paintbrushes. But once the relevant properties had been isolated, pumps remained pumps and paintbrushes remained paintbrushes.

Why are new metaphorical categories unstable? Why do they so often resist incorporation into an established classifactory scheme? Because one categorical grouping does not exist apart from other categories. To classify is to presume a scheme of classification. X is a Y, and not a Z; X is a subclass of M and a superordinate of N; X can be predicated of A, but not of B. New classifications, reclassifications, extensions of categories impact in more or less profound ways on other classifications. What does the world have to be like for rape within marriage to be possible, and what does the world have to be like for a paintbrush to be a pump? What has to change in the way in which we think about the world for marital rape to be included among our concepts, and what has to change if we were to think of paintbrushes as a subset of pumps? To think of metaphoric statements as implicit categorical statements is, I think, correct and persuasive. But by itself, it is not a theory of creativity by means of metaphor. Such a theory needs to take into consideration the interconnections among categories, the implications and presuppositions in categorical classifications that form the webs of belief that are challenged or freshly constructed in the formation of novel metaphors and the enlivening of dead or conventional ones. (As Gibbs points out in this volume's essay, fresh, creative metaphors can as well be formed from conventional metaphors that already have a hold in our thinking (Gibbs, 1994).

In the case of the metaphor "My love is a filing cabinet" I, for one, am still trying to interpret it.

In a timed study I would still not have pushed the button as quickly as I would when confronted with literal sentences such as "My love is a journal editor" or "My love is lasting" or metaphorical ones such as "My love is a rose" or "My love is the sun." This is doubtless because filing cabinets are highly constrained topics, which is also to say both that the values of the dimensions of the attributes of love are not well specified by any of the properties of filing cabinets and that filing cabinets have a very well-defined, specific place in our conceptual scheme. Ray Gibbs would say that "My love is a filing cabinet" is such a difficult metaphor to interpret because it doesn't adhere to one of the five conceptual metaphors by which we conceptualize loveSome concepts, such as love, seem to be expressible only through metaphor. What is love literally speaking? Some elements of the concept are fixed: It is between an individual and at least one other, and the other needn't be another individual. It is an emotion of high intensity or a disposition to act in certain ways. It creates bonds and obligations and expectations, etc. But it is a concept with much left out. Note how intentional states such as love are often characterized metaphorically. In considering why certain concepts are so often metaphorically described, I believe that we need to consider how available the phenomenon in question is for public inspection. I believe that the metaphors that remain in our language and substitute for literal conceptualizations are used for concepts that are not available for public inspection and are given metaphoric characterizations that translate the experiences they give rise to into publicly available ones.

: love is a journey, love is a force, love is a unity, etc. But, for all that, it is still a metaphor, and when I do interpret it I won't have simply created a category that is an abstraction from file cabinets. Instead, I might use "filing cabinet" as a trope for a love in which one lover feels

overanalyzed or locked away; or as a way of speaking of the sad remains of a love that was once vibrant and warm, as in the following poem which I chanced upon:

The Filing Cabinet

Now we file them,

Love's memories,

In manila folders, A to Z,

Place them in steel gray
Hanging files.

Once warm and enfolding
As an old stuffed chair,
Our love then
Embraced us.

Now patterned not by our rhythms, But dissected and desiccated, Fractured fragments lie Wrapped in metal drawers And locked away.

In any case, there will be a number of related concepts and categories that will be brought into the explication of that improbable but interpretable metaphor—concepts and categories that will permit the extension of the metaphor as well. When the metaphor is interpreted, our usual conceptual scheme will be disrupted, but only temporarily.

3. Metaphors as Embodied Concepts

The position of Ray Gibbs emphasizes just such interrelations between concepts, relations that underlie systematic connections between metaphors. While the work of some scholars (e.g. Kittay, Gentner *et al*) have emphasized the systematicity and relationality of metaphors that are novel, the work of Lakoff and Johnson and of those, such as Gibbs, who have followed their forays into cognitive semantics, have stressed the systemacity of the conventional metaphors that "litter" our everyday language.

These cognitive semanticists have taken the idea of systematicity still further. First, they claim

that the interrelations between metaphors reveal a deeper conceptual structure that is itself metaphorical, so that metaphor is not a matter of linguistic, but of conceptual structure. Second, they claim that this conceptual structure is grounded in our bodies, through the use of embodied schemas, which are then projected on to other domains. The process, they claim, results in metaphors that are easily interpretable because they rely on a shared set of recurrent, bodily patterned experiences. Gibbs, in the paper in this volume, builds on these two theses and adds a third, one relevant to the question of creativity: that the creativity of poetic metaphors is more often an extension and a variant of conventional conceptual metaphors based on image schemas than it is a new mapping across domains not already metaphorically mapped by embodied conventional metaphors.

There are merits to each of these proposals, but there are also problems. Many of the difficulties have to do with a lack of clarity about what is being proposed. Others have to do with a zealousness in cognitive semantics that allow its practitioners to overlook some important counters to their arguments. Since this paper cannot be an exploration of all the theses of cognitive semanticists, but only of the views put forward by Gibbs in this paper, I will limit my remarks to the following:

- 1. That embodiment is the ground of metaphor
- 2. That the metaphors putatively based on image schemas dominate poetic metaphor.
- 3. That the notion of a conceptual metaphor is well-defined.

First, however, I want to applaud the idea that creative concepts are not simply the "products of the disembodied mind" but derive from structures that already exist in the world, "i.e. the human body and our perceptions of it" (Gibbs, this volume, p. 23-24). Gibbs correctly decries the separation of body and mind, The duality of mind and body, a doctrine generally attributed to

Descartes, is no largely out of favor with philosophers. The monism that is favored is some variety of materialism, for example, the naturalism of Daniel Dennett or the neurophysiological reductionism championed by Patricia and Paul Churchland, or a supervenience where the mental proerties are said to supervene on the physical ones. However, even as mind is "reduced" to the physical, cognition itself remains almost entirely couched in mental and not physical terms. and even more the priority of mind over the bodily. We are first and foremost embodied creatures, for whom experience is always grounded in our physicality, even as imaginatively we soar beyond its confines. Cognitive semantics, I believe, is right to point to the myriad ways in which our bodily structures, and our most basic physical relations to the world, give rise to relational structures that shape to other interactions.

Embodiment as the Ground of Metaphor

Even as we endorse such claims, we have to take care not to reinstate the body-mind separation. We do this when we take sheer physicality as foundational. The difficulty with the claim that embodiment is the ground of all (or most) metaphors is that the body, at least as it is experienced by humans, is always already animated by mind and the products of mind, that is, culture. Consider the example which Gibbs employs: "stand." In particular, consider the expression "stand for" to mean "hold fast to a particular position." "I *stand for* the right of women to choose whether or not to bring a pregnancy to term." It is difficult to see how our bodily experience of standing would give rise to such a usage if the linguistic use were not mediated by a cultural practice in which individuals, in a seated assemblage, are asked to stand to evince their support or opposition to a point or policy. Nothing about the physical experience of standing would help us understand the usage if the social practice were that you sit down (from, let's say,

a standing position) when you wanted to be counted for or against a point.

Similarly, consider the expression "stand down." The expression has come to mean "a cessation of normal activity," as in "After the last instance of sexual harassment aboard a Navy ship, the Navy decided to have a stand down throughout the force, and spend an entire week doing nothing else but exploring appropriate sexual conduct toward women in the Navy." Again, I suggest that nothing in our bodily experience of erect posture gives us a way to understand such a usage. We are most likely to learn that "a stand down" means a halt, or cessation, in the way in which we learn any lexicalized expression. However, if we know that in courtroom practice, when a witness asks to stand down from the witness chair, she asks to cease giving testimony, then we can connect the meaning of the phrase to a physical movement, but one already endowed with a socially given meaning. It is this meaning that is projected in a new domain. Gibbs himself carefully and appropriately hedges his language, and thereby avoids a reductionist position. Of his experiments with *stand*, for example, he says: "These data provide very strong support for the hypothesis that people's understanding of stand are partly [emphasis mine] motivated by image schemas that arise from bodily experiences of standing" (Gibbs, this volume, p. 21). But the emphasis on image schemas can mislead us into accepting a new foundationalism, this one based on some naturalized conception of the body's relation to the world, one which itself presupposes the very division of mind and body that cognitive semanticists say they want to challenge.

Metaphors Based on Image Schemas Dominate Poetic Metaphor

The notion that embodiment is the ground of all or even most metaphors suggests that we locate metaphors based on image schemas and that these dominate poetic metaphor. This view is

problematic for two reasons. First, we can have metaphors that are very much based on our embodiment but that do not deploy the image schemas that Gibbs and other cognitive semanticists speak of. For example, consider the metaphor I heard one audience member say to his friend at the conclusion of a Martha Graham dance concert: "Now you are no longer a Martha Graham virgin." It's hard to know to what sort of image schema we ought to attribute our understanding of this metaphor—although it is both very easy to understand and it is surely grounded in bodily experience. It is by virtue of our cultural understanding of the loss of virginity as the entry into a world of previously unknown pleasure rather than, say the loss of virginity as enduring a painful experience, or being no longer fit for a sanctified marriage, that both speaker and audience understand the metaphor in the same way.

Second, identifying a metaphor as based on a particular image schema can misdirect us as to the actual nature of the metaphor. It seems to me that this is what happens in the interpretation Gibbs offers of the famous Hamlet soliloquy. Gibbs suggests that the soliloquy incorporates the schema balance—that in the balanced measures of "To be or not to be" we see Hamlet's plight and that our shared bodily experience, captured in the schema balance, allows us to empathize with the quandary of the Danish prince. But, I think, Gibbs is misled in this effort to locate the image schema in which to ground this linguistic figuration. Not balance, but stasis is expressed in the soliloquy. It is the stasis of Buridan's ass, not the common experience of balance, that Hamlet expresses.

Of course, here too, the concept of stasis is itself a physical notion. However a state of equilibrium can either be expressive of a harmony (attributable to a desirable balance) or of an agitation and disharmony (attributable to the pull—or repulsion—of opposing forces). Such

diverse understandings of a physical state indicate once again that metaphors (and figurative language more generally) are grounded not so much in an embodiment that is universally understood, as in an embodiment that can take on myriad interpretations, interpretations that depend on cultural, psychological, and situational variables. The image schema is far too abstract and too general to give us real insight into a specific metaphor or figuration.

Conceptual Metaphors

It is these image schemas which, when "metaphorically projected" to another domain, yield what Gibbs and other cognitive semanticists call conceptual metaphors. Gibbs gives us an example of the image schema source-path-goal which, when projected on to the domain of love, becomes the "conceptual metaphor" love is a journey, and when projected to the domain of purposes and intentions becomes purposes are destinations. The notion is attractive for many reasons. It allows us to understand interconnections among metaphors in a comprehensive way. And because conceptual metaphors are so general, they unify the many specific metaphors, both banal and creative, that are found in our language. These interconnections and unities help explain the swiftness and ease with which we understand metaphors. These are indeed important reasons for appealing to the idea of a "conceptual metaphor."

But then again, I'm not entirely sure what a conceptual metaphor is, and how a conceptual metaphor differs from any other sort of metaphor. As the many theories of concept formation indicate, there is not one universally accepted understanding of concepts. What may be universally accepted is that we think with concepts and articulate our experiences using concepts. As such, concepts are neither metaphorical not literal. They are the principles we use in grouping things together—however we theorize that process. We do not, however, communicate *with*

concepts. Concepts, whether they are universals or mental entities or functions and dispositions (Heath, 1967; Smith and Medin, 1981), require an expressive medium, usually language, to be communicated or expressed. When we use concepts in a particular way, metaphors are produced in the expressive medium (Steinhart and Kittay, 1994). We can speak of concepts that are natural kinds, that are ad hoc, that are socially constructed, etc., but a literal/metaphorical distinction among concepts seems to me to be ill-defined. Because the notion of a conceptual metaphor does offer us a way of speaking about connections among metaphors, we need to ask if we can find an alternative understanding that will provide equally satisfactory insights. What even the dubious poem "The Filing Cabinet" suggests is that almost any metaphor, no matter how removed from any identifiable image schemas, can serve to organize an entire set of thoughts about the topic of the metaphor. If, as I and other semantic field theorists maintain, all terms are lodged in at least one semantic field, and if metaphors project relations governing one field (those of the vehicle) on to another field (those of the topic), then all metaphors are extendable in ways that "conceptual metaphors" are. Furthermore, the interconnections between not only individual metaphors, but extended metaphors, (e.g. the interconnection between purposes as destinies and love as a journey) can also be understood as being not the function of conceptual metaphors. These interconnections are attributable to the underlying conceptual structures and processes that allow us to project one domain on to another and to the connections among concepts and conceptual domains. For example, we can look at both *purposes* and *love* in terms of journeys, destinies, movement and alteration because both purposes and love lend themselves to agentive action, and to change and development. These are features love and purposes share with many, if not most, intentional states. We do not need image schemes nor

conceptual metaphors to explain why we can conceive of both purposes and love in a similar fashion.

Conceptual metaphors are supposed to be embodied concepts, resting on universally available image schemas, and so not only do the conceptual metaphors love is a Journey and Purposes are destinations share the schema source-path-goal but this schema grounds them both in a shared bodily experience. However, agency and change are also grounded in the body, but they are grounded in bodies already inhabited by minds, emotions, and enculturated beliefs. The unities and commonalities exhibited by intentional states allow us to quickly move between fields, utilizing the analogical processes responsible for metaphors.

I locate the creative contribution of metaphor not in a conceptual scheme that is metaphorically structured (in part because I'm not sure what that means) but in the analogical leaps across domains that characterize thought as surely as thought is characterized by any inference processes (viz., induction and deduction). It is the choice of fields to bring together and in the direction in which to carry out the analogies that are the mark of genius of which Aristotle spoke when he wrote:

But the greatest thing, by far, is to be a master of metaphor. It is the one thing that cannot be learnt from others; and it is also a sign of genius since a good metaphor implies an intuitive perception of similarity of dissimilars. Through resemblance, metaphor makes things clearer.

(Aristotle, *Poetics*, trans. W. D. Ross, 1459a5-7.)

What cannot be learnt from others is when the analogical leap across domains needs to be made, when such a projection from one domain on to another will be fruitful. In studies of the work in molecular biology laboratories, Kevin Dunbar (Dunbar, this volume) found that the most creative

and productive ones showed a high frequency in the generation of analogies, and the sustained collaborative elaboration of analogies.

Gibbs may be correct in saying that the "vast majority of novel metaphors in poetry and literature reflect fixed patterns of metaphorical mappings between dissimilar source and target domains. The source domains most frequently used in the metaphorical mappings have bodily-based image schematic structures" (Gibbs, this volume, p. 14?). But this is an empirical claim that would require, first, an exhaustive study of novel metaphors in literature; second, an explicit delineation of novel vs. standard or conventional metaphors; and third, a clear way of showing that a novel metaphor was in fact only a variation of a fixed pattern of metaphorical mappings. As far as I know, none of this work has yet been done. As of now, this is a speculation that easily can influence the choice of poems and metaphors to analyze. Without more well-founded empirical evidence, I would rather say that sometimes novel metaphors play off conventional ones, by extending them in new directions, and sometimes novel metaphors involve new mappings, as for instance between paintbrushes and pumps or love and filing cabinets. The latter, incidentally, are more difficult to interpret and do take subjects longer to understand (Gibbs, 1994; p. ?). By championing this more open thesis, we allow for the interesting conceptual findings available to those who generate many analogies and stimulate many metaphorical mappings. We can also incorporate the view that the creation of metaphor is at once the creation of ad hoc categories, for if most all creative metaphors only elaborate fixed metaphorical mappings, the creation of new categories is strongly constrained by the domains most commonly matched. This more restrictive view, I believe, does not do justice to the sort of stretching and warping of our conceptual schemes that metaphor engenders, a happy de-forming of fixed modes of thought that

allow us to think new thoughts, devise new articulations, and find new concepts by which to understand our world.

Although creativity in language, just as creativity in thought, is always connected to the less creative forms of language and cognition, our theory must still make adequate room for that extra something, that leap of genius, which is not reducible to the commonplace.

Eva Feder Kittay Department of Philosophy SUNY/Stony Brook Stony Brook, New York 11794 ekittay@ccmail.sunysb.edu

References

- 1. Black, M. (1954). Metaphor. *Proceedings from the Aristotelian Society*, 55.
- 2. Dunbar, K. (1996). How scientists make discoveries: Strategies for conceptual change.
 - 3. Gentner, D. (1996). In T. Ward & S. Smith (Eds.), This volume.
- 4. Gentner, D. (1982). Are scientific analogies metaphors? In Miall D. S. (Ed.), *Metaphor: Problems and perspectives* (pp. 106-112). New York: The Humanities Press.
- Gentner, D. (1983). Structure-mapping: A theoretical framework for analogy.
 Cognitive Science, 7, 155-170.
- 6. Gibbs, R. W., Jr. (1994). *The poetics of mind: Figurative thought,language and understanding*. Cambridge: Cambridge University Press.
- 7. Gibbs, R. W., Jr. (1996). How language reflects the embodied nature of creative cognition. In T. Ward & S. Smith (Eds.), *This volume*.
 - 8. Glucksberg, S., & Boaz Keysar. (1990). Understanding metaphorical comparisons:

beyond similarity. Psychological Review, 97(1), 3-18.

- 9. Goodman, N. (1968). Languages of art. Indianapolis, Indiana: Bobbs-Merrill.
- 10. Heath, P. L. (1967). Concept. In P. Edwards (Ed.), *Encyclopedia of Philosophy* (Vol. 2, pp. 177-180). New York: Macmillan and the Free Press.
- 11. Henle, P. (1965). Metaphor. In P. Henle (Ed.), *Language, thought and culture* (pp. 173-95). Ann Arbor, Michigan: Ann Arbor Paperbacks.
- 12. Kittay, E. F. (1987). *Metaphor: Its cognitive force and linguistic structure*. Oxford: Oxford University Press.
- 13. Kittay, E. F. (1982). The creation of similarity: a discussion of metaphor in light of tversky's theory of similarity. *Philosophy of Science Association*, *PSA 1982*, *1*, pp. 394-405.
- 14. Kittay, E. F. (1995). Metaphor as rearranging the furniture of the mind: a reply to Donald Davidson's "What metaphors mean." In Z. Radman (Ed.), *From a metaphorical point of view:A multidisciplinary approach to the cognitive content of metaphor* (pp. 73-116). Berlin; New York: Walter de Gruyter.
- 15. Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- 16. Peirce, C. S. (1931). *Collected papers* (C. Hartshorne & P. Weiss, Trans.) (p. vol.2). Cambridge, Mass: Harvard University Press.
- 17. Richards, I. A. (1936). *The philosophy of rhetoric*. Oxford: Oxford University Press.
 - 18. Ryle, G. (1946). The concept of mind. New York: Barnes and Noble.
 - 19. Schön, D. A. (1979). Generative Metaphor: A perspective on problem solving in

social policy. In A. Ortony (Ed.), *Metaphor and thought* (pp. 254-84). Cambridge: Cambridge University Press.

- 20. Smith, E. E., Douglas L. (1981). *Categories and concepts*. Cambridge, Mass: Harvard University Press.
- 21. Steinhart, E. (1995). A cognitive theory of metaphor. Stony Brook, New York: Department of Philosophy, SUNY at Stony Brook.
- 22. Steinhart, E., & Kittay, Eva F. (1994). Generating metaphors from networks: A formal interpretation of the semantic field theory of metaphor. In J. Hintikka (Ed.), *Aspects of metaphor* (pp. 41-95). Dordrecht / Boston / London: Kluwer Academic Publishing.
- 23. Thagard, P., Holyoak, K., Nelson, G., & Gochfeld, D. (1990). Analogue Retrieval by Constraint Satisfaction. *Artificial Intelligence*, *46*, 256-310.