Beyond Literal Meanings: The Psychology of Allusion

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General Article

BEYOND LITERAL MEANINGS: The Psychology of Allusion

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When people understand expressions that are intended nonliterally, two kinds of meaning are simultaneously apprehended: the literal meanings of the words themselves and the speaker's intended figurative meaning. Standard models of language comprehension assume that the literal meanings of figurative expressions are rejected in favor of a nonliteral meaning. I propose an alternative approach in which literal meanings are systematically used to convey figurative meanings through the process of allusion: *The use of an expression to refer to entities or situations that are prototypical exemplars of culturally shared concepts and symbols. This approach provides an account of how people use and understand figurative language in general, and metaphor and idioms in particular.*

"And now for something completely different." For readers familiar with the British television series "Monty Python's Flying Circus," this line has two meanings. One meaning is the linguistic, or for lack of a better term, the literal meaning: What the words themselves mean. The other "meaning" is the allusion to, i.e., the reference to, the Monty Python show, and to how this line was used as an absurd introduction to something that was not different at all. Our ability to recognize and to use both of these meanings simultaneously is, perhaps, the key to how we are able to recognize and use nonliteral meanings in general.

Consider the kinds of nonliteral expressions that we encounter every day in conversation, on radio and television, in newspapers and magazines. Idioms and clichés abound: spill the beans, kick the bucket, where's the beef, we'll cross that bridge when we come to it. There are no real beans, no one is booting a pail with a foot, there is often nothing edible involved in the situation, and the bridge alluded to in the expression crosses no river that one can see. Yet we have no trouble at all understanding these expressions. We also have no trouble understanding statements that, at face value, are absurd. I refer here to ordinary conversational metaphors such as: my job is a jail, some surgeons are butchers, and one of my favorites, Sam is a pig.

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LINGUISTIC MEANING AND SPEAKER MEANING

What is common to all of these types of expressions? The words and phrases apparently do not mean what they literally mean. Phenomenologically, there is the simultaneous apprehension of two kinds of meanings: linguistic meaning and speaker's meaning. In many cases, both of these kinds of meaning are relevant and intended. The linguistic meaning of the expression "It's hot in here," for example, refers to the ambient temperature somewhere. The speaker's full meaning, however, cannot be known without additional contextual information. The speaker could mean "please open a window," "the air-conditioning system is on the blink again," or "the toaster oven isn't broken after all." In each of these cases, the speaker does intend to convey the information that it's hot in here *but* also uses that meaning to convey something completely different. In some cases, that additional something different may not even be consciously intended, but clear nevertheless, as when the violinist Jascha Heifitz and the pianist Vladimir Horowitz were listening to the debut of the young violin prodigy Isaac Stern at Carnegie Hall. At the end of the first piece on the program, Heifitz, mopping his brow, remarked, "It's awfully warm in here." "Not for us pianists," replied Horowitz.

The Standard Pragmatic Model

Examples such as these have led to what I will call the standard pragmatic model of how we understand the nonliteral. This model takes literal understanding for granted: Literal understanding occurs automatically and unconditionally. According to this view, understanding the nonliteral is more complicated because such understanding requires at least three steps, each taken in turn. No matter what the circumstances, we first derive the literal meaning of an utterance. Second, we see if the literal meaning makes sense in context. If it does, we stop there. If it does not make sense in context, then we take the third step and seek some other, extralinguistic (or nonliteral) interpretation. As the philosopher John Searle put

it: "When sentence meaning is defective, look for a speaker meaning that differs from sentence meaning" (Searle, 1979, p. 114).

Problems with the Standard Pragmatic View

Consider first the priority issue. The standard sequential three-stage model says that people should find it easier and should need less time to understand literal than nonliteral meanings. This is a necessary consequence of the model because understanding the literal is always the very first step; but it is simply not so. Ortony, Schallert, Reynolds, and Antos (1978), Gibbs (1980), and many others have convincingly shown that people can understand nonliteral expressions, such as metaphors, indirect requests, and idioms as rapidly and as easily as comparable literal expressions. In some cases—familiar idioms such as "kick the bucket," for example—the nonliteral appears to be the very first meaning that comes to mind. Such expressions are understood more quickly in their idiomatic senses (i.e., "to die") than in their literal senses (i.e., to strike a container with the foot) (Gibbs, 1980).

A second necessary implication of the standard model is that understanding the nonliteral is optional. People should seek nonliteral meanings if and only if the literal meaning makes no sense in context. We have shown that this, too, is not so. People cannot ignore the nonliteral meanings of utterances even when the literal meaning makes perfect sense in context (Gildea & Glucksberg, 1983; Glucksberg, Gildea & Bookin, 1982). This was demonstrated most convincingly by Keysar (1989). College students were given brief stories to read, such as this one:

> Bob Jones is an expert at such stunts as sawing a woman in half and pulling rabbits out of hats. He earns his living traveling around the world with an expensive entourage of equipment and assistants. Although Bob tries to budget carefully, it seems to him that money just disappears into thin air. With such huge audiences, why doesn't he ever break even?

The students then decided, as quickly as possible, whether a target sentence such as *Bob Jones is a magician* was true or false. This target sentence is literally true, but metaphorically "false." With respect to Bob's financial affairs, he is not "a magician" at all! If people simply stay with the literal when it makes sense, then the "false" metaphorical meaning should not play a role here at all, yet it does. It inferferes with and so slows the correct "true" decision on the true literal meaning, Bob Jones is a magician by profession (Keysar, 1989). When Bob Jones is described in this same context but as making a profit despite huge expenses, then people very quickly agree that he is a magician by profession. The metaphorical meaning can thus either reinforce or interfere with the literal meaning, even when that literal meaning is not "defective" in Searle's sense (see also Glucksberg, Gildea, & Bookin, 1982).

ROLE OF LITERAL MEANINGS IN GENERAL

The studies briefly described above were designed to examine just two issues. The first is whether literal meanings have unconditional priority. The second is whether metaphorical meanings are optional. Clearly, the answer to both of these questions is not at all. There is no general priority of the literal, and there is nothing at all optional about understanding expressions such as "Sam is a pig." The standard theory, then, is incorrect in placing unconditional priority on the literal meaning. Paradoxically, the standard theory is also incorrect in ignoring the role of literal meaning in the search for figurative meaning.

According to standard theory, when a literal interpretation is found wanting, the literal meaning is rejected in favor of an alternative, nonliteral meaning. I think that this view is seriously mistaken. Literal meanings are not simply rejected. Rather, they are used, along with figurative meanings, to arrive at speaker meaning, i.e., what a speaker intends the listener to understand. In the remainder of this paper, I will examine the implications of this claim for two types of figurative expressions: metaphor and idioms.

Metaphor as Class Inclusion

Consider the fate of the literal meaning of metaphoric expressions such as "My job is a jail." Such metaphors have the surface form of a class inclusion assertion. According to standard pragmatic theory, the class inclusion assertion "My job is a jail" is recognized as false. How then do people understand such false assertions? Again according to the theory, listeners assume that people generally speak the truth (Grice, 1975), and so the false class inclusion assertion is converted into a comparison assertion. My job is not really a jail, it's only like a jail. As the philosopher Donald Davidson (1978) argued, metaphors are almost always false, but similes are always true; there are always any number of ways that two things can resemble one another. The task in understanding similes is to discover in just what ways the two things are supposed to resemble one another, namely, what are the relevant grounds for the comparison?

Truth, however, is not enough. According to Grice's (1975) cooperative principle, people are also supposed to

be informative and relevant in conversations. What happens when a class inclusion assertion is true, but apparently not relevant? Imagine having a conversation about various kinds of dogs as pets, and I tell you that "My dog is an animal." Even though this statement is true, you will not take this as my intended meaning because you already know this fact, and I know that you know this fact, and I am not going to say "My dog is an animal" to inform you of a fact that you know, and that I know you know, etc.

Converting "My dog is an animal" into a simile "My dog is like an animal" does not solve the speaker meaning problem, primarily because it makes no sense to say that a dog is like an animal when it already is an animal. What, then, can I mean when I say that my dog is an animal? The intended meaning might be the same as in the assertion "Arnold Schwartzeneger is an animal" or the meaning in the John Belushi movie *Animal House*. In each of these uses, the term "animal" can have one of several meanings: Animal as the alternative to "vegetable" in biological taxonomies, or "animal" as the name of a different superordinate category, such as the category of animate beings that behave in particularly animalistic ways. In this latter category, sheep would not be animals, but drunken fraternity members, awesomely muscular and violent actors, and some breeds of dogs would be animals.

To say that one's dog is an animal, then, is to use the word "animal" in a new and interesting way . . . to refer to a category of things that does not (at least yet) have a name of its own.[1] Might the same strategy be at work in metaphors such as "My job is a jail"? Can we use the word "jail" to allude to a prototypical confining thing, the "literal" jail, while simultaneously referring to a category of such things for which we have no commonly accepted label or name?

One answer to this question may come from languages that generally do not have superordinate category names. All languages have names for basic-level objects, but some do not have names for superordinate categories. One such language is American Sign Language (ASL). In ASL, basic-level objects have primary signs, strictly analogous to such single-word English names as *chair, table,* and *bed*. The superordinate-level category of *furniture* has no sign of its own in ASL. Instead, ASL signers use basic object signs that are prototypical of that category, as in:

HOUSE FIRE (+) LOSE ALL CHAIR-TABLE-BED (etc.), BUT
ONE LEFT, BED

which is interpretable as "I lost all my furniture in the house fire but one thing was left: the bed" (Newport & Bellugi, 1978, p. 62). The strategy of using the name of a prototypical category member to refer to a superordinate category that does not have a conventional name of its own appears in spoken languages as well.

A particularly striking example was reported in a newspaper article about the war-crimes trial of John Demjanjuk, who was accused of being "Ivan the Terrible," a sadistic guard at the Treblinka death camp in Poland during the Second World War: ". . . the name Demjanjuk has become a noun in Israel, a word to identify *an ordinary person capable of committing unspeakable acts*" [emphasis added]. This category of persons was presumably created in the context of many such tribunals, and has now been given a name. That the category name and the person's name are quite distinct is apparent in the following interchange between an American reporter and an Israeli attending the trial:

ISRAELI: If he is a Demjanjuk, then he should be condemned to death.
REPORTER: But he is Demjanjuk, his name is John Demjanjuk.
ISRAELI: I know his name is Demjanjuk, but I don't know if he is *a* Demjanjuk. (Shinoff, 1987)

Other examples of this type abound. A number of native American languages occasionally use prototypical category member names for the category name itself. In Hopi, for example, the name of the most abundant deciduous tree, "cottonwood," is also used as the name for the entire class of deciduous trees (Trager, 1936–1939). The word for eagle is used by Shoshoni speakers to refer to large birds in general (Hage & Miller, 1976). The general principle is clear. The name of a prototypical category member can be used to name a category that has no name of its own.

Are these special cases, or do they represent a common communicative device? In languages such as English that do have superordinate category names, this strategy can be used to construct ordinary, everyday metaphors (Fig. 1; Glucksberg & Keysar, 1990). To refer to someone as "a Demjanjuk" alludes to the original war criminal, and also makes metaphorical use of his name, Demjanjuk. When I tell someone that "My job is a jail," I am using precisely this strategy of using a prototypical basic-object name to refer to a superordinate category that has no conventional name of its own. What is the category that is exemplified by the basic-level object "jail"?

1. One might argue that the word "animal" in the sense of being stereotypically animalistic has already come into common usage. The *Random House Dictionary of the English Language* lists, as one sense of "animal," "an inhuman person; brutish or beast-like person, as in *She married an animal.*"

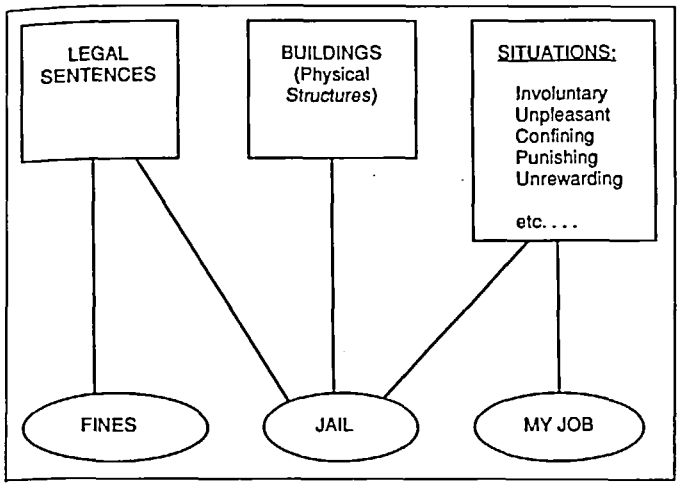

Fig. 1. Multiple classification of the concept "jail" (after Glucksberg & Keysar, 1990).

The category referred to as "a jail" can be described by a list of distinguishing features, but it is difficult to enumerate these features exhaustively. By naming the category "jail," "my job" inherits those features of "jail" that can be plausibly attributed to "my job." The word "jail" can refer either to the token, *jail,* or the type *jail.* As a metaphoric vehicle, it refers to a type of thing, whereas when it is used literally it would refer to an actual token, jail. The difference between these two uses of the word "jail" is analogous to that between "Demjanjuk" used to name a person and the same term used to refer to a class of people with certain characteristics, namely, *ordinary people capable of committing unspeakable acts.* Roger Brown captured this very distinction when he argued: "Metaphor differs from other superordinate–subordinate relations in that the superordinate is not given a name of its own. Instead, the name of one subordinate (i.e., the vehicle) is extended to the other . . ." (1958, p. 140).

From Metaphor to Idiom

And now for something completely different: Idioms. How might literal meanings play a role in our use and understanding of idioms such as *Pop the question, Spill the beans, Speak your mind,* or *Kick the bucket?* The words in these idioms seem to have virtually nothing to do with the idiomatic meanings that they express. Standard pragmatic theory is explicit on this issue: Word meanings play absolutely no role in idiomatic meaning. Idioms are considered, in essence, to be nothing more than long words (Swinney & Cutler, 1979). The idiom *by and large,* for example, is roughly equivalent to the word *generally.* This meaning of *by and large* is simply stored in the mental lexicon, just as the meaning of any word is stored in the mental lexicon. One psychological process model that is based on this idea is the direct access hypothesis, proposed by Gibbs (1980). According to this model, people can directly look up the meanings of idiomatic expressions *without* activating word or phrase meanings at all. Like other fast look-up models, it can account for rapid idiom comprehension, but it does not account for our ability to substitute words in idiomatic expressions without losing or even changing meaning, as when "crack the ice" is substituted for "break the ice" (Gibbs, Nayak, Bolton, & Keppel, 1989).

Even more troublesome is the implication that people can somehow turn off their language processing system. Ever since Stroop's classic demonstration (1935), we have known that people cannot inhibit understanding the meanings of words that are attended to. If we do have a nonoptional, automatic language processing mechanism, then it follows that the meanings of the words in idioms are activated. Once activated, do these word meanings simply fade away?

Examination of how people use and understand idioms suggests that not only are word meanings activated, they can also be used creatively. We have already seen one example of such use, as when we substitute "crack the ice" for "break the ice." This example demonstrates lexical flexibility, interchanging words without substantially changing an idiom's meaning. More interestingly, we can substitute words in idioms, as in "shatter the ice," and create new idiomatic meanings that are based on *both* the original idiom's meaning and the relation between the meanings of the original words and the meanings of the new words. In this case, the difference between the meaning of "break" and the meaning of "shatter" creates a new idiomatic meaning, something like "break down an uncomfortable and stiff social situation flamboyantly in one fell swoop!" This is not simply an example of lexical flexibility, it is an example of semantic productivity (Cacciari & Glucksberg, 1991).

Such semantically productive idiom variants appear constantly in everyday conversation and in the media. One example appeared in a *New York Times* article on the rise and fall of the Wall Street firm Drexel Burnham Lambert, which had made a fortune on junk bonds and then found itself seriously short of cash. Before declaring bankruptcy, the firm distributed its assets among the senior executives in the form of huge cash bonuses, even though the firm was clearly in financial trouble. As a result of this bonus distribution, the firm's cash reserve was depleted, forcing Drexel into bankruptcy. In this context, the meaning of this twist on a familiar idiom is

clear: "Drexel's senior executives, not content with collecting one golden egg after another, seem to have insisted then on eating the goose." Similarly, Donald Barthelme's witty title for an essay on contemporary literature—"Convicted Minimalist Spills Bean"—makes perfect sense to those who know of his reputation as a minimalist writer.

In understanding these twists on old idioms, word meanings must be accessed and used. In addition, the idioms themselves must be recognized, and the original idiomatic meanings also must be used. The processes involved in these cases are not unique to idioms, however. They are precisely the processes that must be involved whenever familiar phrases are used in discourse. The familiar phrase may be an idiom, a song title, a line of poetry, or part of a song lyric. Whenever any of these is used in conversation, people recognize the allusion to the original, and also fully process the word meanings. These two operations yield two products: the recognition and understanding of the original phrase, and the meanings of the individual words themselves. These two sets of meanings are then integrated with the discourse context to arrive at an interpretation of the speaker's intended meaning. In this way, an allusion to, say, a song, may convey quite different meanings depending on the context.

Consider the familiar opening line of the song "America the Beautiful": "O beautiful for spacious skies . . ." If this line is spoken while flying over the Rocky Mountains on a stunningly clear and sunny day, it could be taken as a comment on the physical beauty of our country. If spoken while driving past garbage dumps on the New Jersey Turnpike between exits 14 and 15 in the northbound lanes, it could be taken as an ironic comment on environmental policy. Furthermore, an allusion to "America the Beautiful" need not be confined to environmental aesthetics. This line could be spoken in the context of a discussion of the problems of drug addiction, poverty, and homelessness in our society, and here it could be taken as a sardonic comment on our social and political system.

The framework that I have outlined for understanding familiar phrases, including idioms, suggests at least three functional roles for word meanings in idiom comprehension and use. First, word meanings can play important roles in immediate comprehension, even when the relation between word meanings and idiomatic meaning is opaque. There is no apparent relation between the meanings of the words "kick" and "bucket" and the concept "to die" in the idiom "kick the bucket." Nevertheless, word meanings and idiomatic meaning interact to guide and constrain this idiom's use.

Our understanding of what it means to die guides and constrains how the idiom "kick the bucket" may be used. People can die silently, and so it makes sense to say "He silently kicked the bucket." People cannot die "sharply," so even though one can kick sharply, one cannot say "He sharply kicked the bucket." Similarly, the meanings of the words "kick" and "bucket" can also play important roles. Kicking is a discrete act, and so even though one can say "He lay dying all week," one cannot say "He lay kicking the bucket all week," because the only way one can kick a bucket all week is to kick it over and over again, but one cannot die over and over again.

A second way that word meanings can play a role is revealed in lexical flexibility. We can substitute words in idioms with words that are similar in meaning and still retain idiomatic meaning, as in "*crack* the ice" for "*break* the ice"; but nuances of meaning must be observed. We cannot say, for "break the ice," "*crush* the ice," because crushing is not a sudden, discrete act such as breaking or cracking.

A third important role for word meanings is for semantic productivity, where new idioms are generated from old to create new idiomatic meanings. People should have no difficulty in understanding such variants as "Roger always bit off much less than he could chew," or the recent newspaper headline about a summit conference on the Iraqi Persian Gulf situation, "The signals were loud and unclear." Even young children can spontaneously use idioms productively in discourse, once the original idioms have been learned. One five-year-old girl learned the expression "spill the beans" as meaning "tell a secret." Later that day, she told her father, "Don't throw the beans to Rebecca! She's not supposed to know!" (Greenberg-Concool, 1990).

These kinds of examples suggest that people should have no trouble understanding novel idioms that are based on familiar ones. As a first step in exploring this issue, we gave brief context stories to people, each concluding with a target sentence. The stories were read one line at a time, self-paced, on a computer-controlled screen, and reading times were used to measure comprehension difficulty. One of the stories that we used concerns a captured pilot interrogated by the enemy:

Lieutenant Sam Murphy was a pilot during the war. While conducting a reconnaissance mission he was shot down over enemy territory and captured. He was presented before one of the enemy commanders and was interrogated for details of his squadron's attack strategy. He knew the entire battle plan, but he acted ignorant. The enemy commander threatened to kill him if the plans weren't disclosed.

The next line contained the target sentence, which could be one of four kinds: The original idiom, "Sam spilled the beans"; a literal paraphrase, "Sam told him

all"; a variant of the original idiom, "Sam didn't spill a single bean"; and a literal paraphrase of the variant, "Sam didn't say a single word." We tried, of course, to match sentence length and complexity, but in general the variant forms were longer than the original. If anything, this potential confound would work against the hypothesis, making it more difficult to understand novel than original expression forms.

Despite this, our results were precisely as expected (Fig. 2). First, we confirmed earlier findings on the relative ease of understanding familiar idioms. In this case, original idioms were understood more easily (that is, were read more quickly) than their literal counterparts. "Spill the beans" took less time to read than "told him all"; "They're a dime a dozen" took less time to read than "They're not worth much."

Earlier studies had compared the relative ease of understanding the two senses of idiomatic expressions such as "spill the beans" in the tell-secrets sense versus "spill the beans" in the actual spilling-of-real-beans sense. Our results extend this finding to the case of two equally appropriate utterances that mean the same thing, one expressed literally, the other idiomatically. The familiar idiomatic expression is easier to understand than the straightforward literal one.

Our other expectation was also confirmed. There is absolutely no hint of any difference between novel idiomatic expressions and their literal counterparts. People have no more difficulty in understanding "didn't spill a single bean" than in understanding "didn't say a single word" where both mean roughly the same thing. This finding has important implications for how we view so-called nonliteral language comprehension.

The most parsimonious and general interpretation of these findings is that even when dealing with stock phrases, including idioms, people routinely and automatically activate word meanings and parse phrases and sentences. People then use the products of these linguistic analyses even when the expressions are intended to mean more than the literal. When idiomatic expressions are modified, then the differences in meaning between the original and new wording can be exploited by speakers, and understood by listeners, to convey new idiomatic meaning.

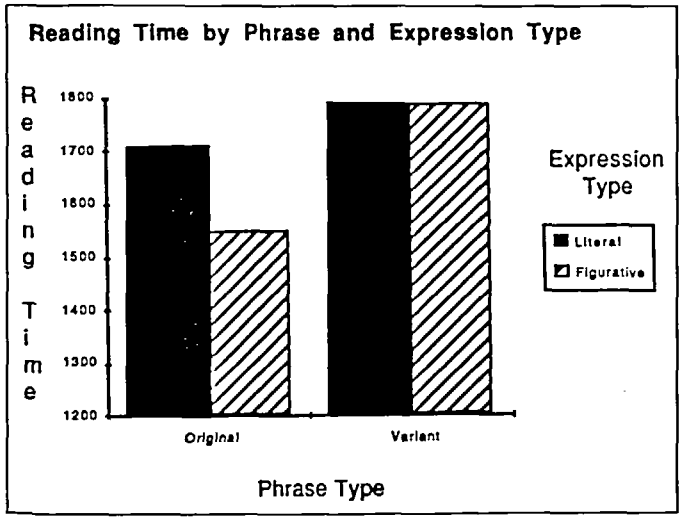

Fig. 2. Reading time by phrase and expression type (msecs).

Not all idioms, of course, can be productively varied. Consider, first, phrasal idioms such as *spill the beans* and *pop the question*. Such idioms vary in the extent to which they are semantically analyzable (Cacciari & Glucksberg, 1991; Gibbs et al., 1989; Nunberg, 1978). The constituent words of analyzable idioms can be mapped directly onto their idiomatic referents. In the idiom *pop the question*, for example, the verb "pop" and the noun phrase "the question" can be mapped directly onto their respective idiomatic referents "suddenly ask" and "marriage proposal." In contrast, the constituent words in nonanalyzable idioms such as "kick the bucket" cannot be mapped onto the idiom's meaning of "die"; only the phrase as a whole can be mapped. In general, such idiom types generally will not be used in variant forms. Gibbs et al. (1989) report data consistent with this argument. Nonanalyzable idioms are less flexible lexically than analyzable ones.

Analyzability, however, is neither a necessary nor a sufficient condition for an idiom to be varied productively. Consider idioms such as *two left feet*. The noun phrase *two left feet* contains three constituent words, and these three words cannot, of course, be individually mapped onto the idiomatic meaning of "clumsy." Nevertheless, idioms of this type can still be productive because the semantics of the phrase itself has a direct functional relation with the idiom's meaning. Variations of this idiom will be productive if the variation plausibly exploits this relation. The phrase *two left feet* alludes to the grace (or lack of same) with which someone might dance if he or she did in fact have two left feet, hence the general idiomatic meaning of clumsiness. Changing the quantifier from *two* to *three* simply modifies the degree of clumsiness. If *two left feet* implies clumsy, then *three left feet*, by ordinary discourse processes, implies more than usual clumsiness.

In general, when an idiom's constituents bear functional relations to the idiom's meaning, then variants will be productive, provided that a plausible communicative intent can be inferred (Cacciari & Glucksberg, 1991). The change from plural to singular in Donald Barthelme's essay "Convicted Minimalist Spills Bean," for example, is productive because of the relation between the singular form of the noun *bean* and the concept of minimalism.

Similarly, the phrase *popped the questions* would normally be difficult to understand because one usually proposes marriage to one person at one time. If, however, the question-popper were a notorious bigamist, then pluralizing the word *question* might make sense. The constraints of general world knowledge, then, seem as important for idiom flexibility and productivity as are more formal semantic factors such as analyzability.

CONCLUSIONS

There are two general conclusions that I would like to draw from the work described in this paper. The first should be reassuring to all of us: People mean what they say. Returning to our example of simple metaphors, when I say that *My surgeon was a butcher,* I mean the categorical assertion seriously. I do not mean that my surgeon was merely like a butcher, otherwise I would have said so. We always have a choice of alternative ways to express ourselves, and our choices carry meaning for our listeners.

The second general conclusion is that word meanings are always activated, even when we use such stock idioms as "kick the bucket," and these word meanings play important roles in both our use and our understanding of even the most nonliteral expressions. People cannot isolate or ignore the meanings of words or the meanings of phrases when engaging in discourse. At the same time, people rely on familiar, memorized "chunks" of speech whose meanings derive not only from the language itself, but from their roles in everyday experience. Included in this category of language are all those word strings that we have learned, such as movie and book titles, song titles and song lyrics, poetry, proverbs, clichés, morals, and so forth. All of these have "literal" meanings, and all of these have other meanings as well. Fluent speakers of a language in a culture must be able to deal simultaneously with the language itself, and with the use of language in that culture. Like such memorized word strings as songs and poems, idioms are recognized and identified as having their own meanings, but they are simultaneously treated as linguistic entities and analyzed as such. We are just beginning to understand how people can integrate these various levels of meaning. An important first step is to recognize that people do, indeed must be able to, perform such integrations in discourse.

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