

## A PSYCHOLINGUISTIC VISION OF METAPHOR

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### 1. Introduction

- (1) Atlético smeared Cruzeiro at Mineirão last night.
- (2) I'm locked in this cell of depression and they lost the key.
- (3) The citizens have been dealt with the same bad hand for 15 years.
- (4) I didn't say your meatballs were like rubber; I just said  
the tread on this one looked a little thin.
- (5) Brasília called to say the checks would be late.
- (6) The bulldozer raped the cornfield.

The sentences above all have two things in common. They are all semantically anomalous, and, in a reasonable context, they are all perfectly understandable. They are understandable because they are interpreted to be metaphorical. This process of interpreting something that is apparently utter nonsense is the subject of this article. For years the subject of metaphor has been only lightly studied by scholars of language and has been virtually ignored by psycholinguists until the last eight years. Recently there has been a surge of interest in the topic. Although much of the work is still preliminary, I would like to offer some psycholinguistic perspectives on this fascinating and important problem of language processing.

I will be using the term "metaphor" rather broadly, to refer to all sorts of figurative language, i.e., language which speaks about something as if it were something else. In this sense I will be including simile, e.g. (7) and personification, e.g., (8) as well

as what is generally included in the more narrow sense of metaphor, e.g. (9).

(7) My job is like a prison.

(8) My job is strangling me to death.

(9) My job is a prison.

The general plan of this article will be as follows. First of all, some important general characteristics of metaphor will be examined; these will have to be considered by any eventual theory of metaphorical processing that emerges. Secondly, some explanations of metaphor that have been offered will be briefly examined. Finally, some crucial psychological relations of metaphor and knowledge will be further explored through examination of one particular application of metaphor, namely, its use in psychotherapy.

## 2. General Characteristics of Metaphor

Metaphors can occur in any syntactic structure or speech-act type (e.g., questions, imperatives) and are thus not dependent on any particular linguistic form to communicate them. It may be that metaphor is itself a distinctive speech act, i.e., the act of intending to be metaphorical. If the hearer does not recognize the speaker's use of this speech act, e.g. (10), a totally inappropriate response could result, e.g. (11).

(10) John devoured the newspaper after dinner.

(11) Didn't he get enough to eat?

Such a speech-act misinterpretation is sometimes the basis of humor, as in (10-11).

Metaphor involves a nonliteral level of meaning and a uniting of two disparate semantic domains of knowledge. The real subject of the discourse is the *topic*, also called the *tenor* or *focus*. The

thing that the topic is talked about in terms of is called the *vehicle*, or *frame*. The relationship or similarity between the two is the *ground*. For example, if someone says (7), his job is the topic, prison is the vehicle, and whatever way the two are alike is the ground. The use of a metaphor somehow involves drawing on the meaning of both of the semantic domains, e.g. knowledge about one's job and about prisons. Typically at least one of the semantic domains, most often that of the vehicle, is concrete, and thus very amenable to imagery (see Harris, Lahey & Marsalek, 1980, for a more extended discussion of metaphor and imagery).

A closely related point is that metaphors are typically anomalous literally, e.g., (12), though, in the last analysis, anomaly

(12) John is an octopus around women.

(13) The old rock is becoming brittle with age.

(14) Determined to conquer, the troops marched on.

is contextually determined. For example, (13) does not appear to be either metaphorical or anomalous, but if the subject of the discourse is an aging professor starting to lose some of his mental faculties, if not his students, then (13) becomes metaphorical and is literally anomalous in the context. Similarly, (14) becomes metaphorical if the topic of the discourse is usually children whom the babysitter cannot control.

The development of metaphors is a natural historical process of language growth and change. A novel metaphor is first used as a metaphor. If that metaphor becomes widespread in use, it may eventually become a dead (frozen) metaphor, which is so widely used it is scarcely recognized as a metaphor (e.g., *leg* of a table, *neck* of land, *head* of a department, one team *beating* another). Failure to recognize this historical process of language growth may cause

some inappropriate responses to literature of past eras, as when one American television character commented, "I never did understand why Shakespeare was supposed to be so great; all he did was write in clichés." In fact, the dichotomy of metaphorical versus literal is perhaps best conceptualized as a continuum from highly and novelly metaphorical to totally literal and nonmetaphorical, with all degrees of dying and dead metaphors in between. The focus in this article is on metaphors toward the novel end of the scale.

Although metaphor is commonly thought of as a highly literary and esoteric form of language, it is, in fact, very widely used in all types of speech and writing. It is frequently used in highly informal and colloquial speech. For example, namecalling and profanity are very heavily metaphorical, often involving dead metaphors e.g., (15). Any kind of persuasive speaking, of which political campaign rhetoric is a good example, is highly metaphorical, e.g. (16)

(15) You son-of-a-bitch!

(16) My opponent's policies are holding the state for ransom. Finally, metaphor is, of course, widely used in literature and other types of "language-for-language's sake" writing, e.g., poetry, songs, jokes (17-19). In whatever its use, metaphor is testimony to the creativity and productivity of language, in a sense perhaps even more cognitively impressive and abstract than the sense discussed by Chomsky (1968). O.K.!

(17) Whether 'tis nobler to take arms against a sea of troubles...

(18) You fill up my senses like night in a forest.

(19) Customer: What's the soup today?

Waiter: What day is it?

Customer: Saturday.

Waiter: Then it's Cream of Friday.

can readily create and understand novel metaphors, not only in a sequence of words we have never used before, but also involving two domains of knowledge that we may have never before considered together.

Metaphors frequently express something which is either inexpressible literally or only expressible in literal language in some very difficult or cumbersome fashion. This property becomes clearer when one tries to paraphrase metaphors like (20-22).

(20) There's a cancer growing around the Presidency.

(21) I'm in a cage where I can't get out and my family is standing guard outside.

(22) I am the Way, the Truth, and the Life.

The final general property of metaphor is at once perhaps the most obvious and the most elusive, i.e., the aesthetic pleasingness of metaphors. Most people would agree that the first member of each pair below is more pleasing aesthetically than the second, but why this is the case is much more difficult to articulate.

(23) a. Tomorrow and tomorrow and tomorrow creeps in its petty pace to the last syllable of recorded time.

b. The future seems to come very slowly and will always continue to do so.

(24) a. Somebody pressed the fast-forward button on my life.

b. My life is going by too fast.

(25) a. Some men tell little white lies, but Andy goes in for technicolor extravaganzas.

b. Some men tell small lies, but Andy tells great big ones.

(26) a. You ain't got the sense of a mule's hind end.

b. You're stupid.

## 6. Some Explanations of Metaphor

While there is no generally accepted theory of metaphor, it has been studied in philosophy, linguistics, and psychology over the years. Let's look briefly at some of the types of explanations that have been offered. At this point few of these have been sufficiently developed to be called a "theory" of metaphor.

One of the most basic general types of explanations is that a metaphor involves an explicit or implicit comparison of the topic and the vehicle (e.g., Alston, 1964). This approach goes back as far as Aristotle and has taken many different forms. Some speak of the vehicle being substituted for the topic. For example, Shakespeare substitutes the sun for Juliet in (27).

(27) Juliet is the sun.

Other versions of this approach would speak rather of comparing Juliet and the sun, a comparison that is explicit in a simile and implicit in other figurative forms.

In a totally different vein, Sigmund Freud and the psychoanalytic tradition speak of metaphor as being a way of expressing forbidden impulses in a socially appropriate and nonthreatening way, e.g. saying (28)

(28) My team really killed the opponents

expresses one's feelings of repressed aggression against these opponents. While this approach may have some occasional validity in particular instances, it has not been seriously considered as a comprehensive contemporary model of metaphorical language processing.

A somewhat more sophisticated comparison model of metaphor is one of feature transfer (e.g. Smith, Rips & Shoben, 1974), which says that metaphor comprehension involves comparing the lists of semantic features of the topic and the vehicle and transferring

the relevant features from the vehicle to the topic, in order to comprehend the metaphor. Of course, not all features are relevant; for example, in (29) the

(29) Her eyes were pearls.

features of roundness and whiteness may be appropriate to transfer from pearls to eyes, while the features of being found inside shells and being put together into necklaces would not be.

A still different approach stresses the interaction (Black, 1962, 1979; Richards, 1936) or *fusion* of the two semantic domains of the topic and vehicle (e.g., Verbrugge and Mc Carrel, 1977). Using the metaphor is not purely a mapping of one semantic domain onto the other, as a comparison or feature-transfer model might predict, but rather it involves a "plastic reshaping" of both semantic domains, whose knowledge structures are then *both* altered in some significant, albeit possibly very small, fashion. For example, hearing (30) may slightly change your stored

(30) Skyscrapers are the giraffes of a city.

knowledge about both giraffes and skyscrapers. While some sort of interaction or fusion hypothesis is probable correct, few specific theories have yet been developed to test.

A more quantitative approach involving the statistical techniques of multidimensional scaling (MDS) has been used by some Yale University psychologists (e.g. Tourangeau & Sternberg, 1982). Using MDS techniques whose details we need not go into here, Sternberg and Tourangeau can measure two types of semantic distance, i.e., how similar in meaning two concepts or semantic domains are. On the one hand, the distance between the semantic domains of the topic and vehicle can be measured. For example, the distance between young teenage girls and heavenly bodies is relatively large (see (27)); this is the "between-domain distance". On the other hand, the

similarity of the relative positions of each concept within its own semantic domain may be measured. Again, using example (27), the "within-domain distance" of Juliet and the sun may be relatively small, since Juliet might occupy the same position relative to other young teenage girls as the sun occupies relative to other heavenly bodies. Developing this approach even further, Sternberg and Tourangeau argue that the best and most comprehensible metaphors have a large between-domain distance but a small within-domain distance. This might explain the obscurity and lack of

(31) Basketballs are the futebol balls of the basketball world.

(32) Pelé is the lettuce of the sports world.

appeal of (31) and (32). In (31) the between-domain distance of basketball and futebol is too small; in (32) the relative position of Pelé among athletes and lettuce among vegetables is too dissimilar, if indeed a reasonable ground can even be determined at all.

#### *4. Metaphors and Knowledge*

A theme running through many of these explanations is the question of the relation of metaphor and knowledge, more specifically, how does a metaphor increase one's knowledge or allow the access of increased knowledge from long-term memory, especially in comparison to saying the same information in a purely literal fashion?

One way that metaphors may impart increased knowledge is by increasing the richness of the knowledge structure of the stored memory representation and increasing the possible avenues of retrieval. The fact that two semantic domains are involved rather



than one necessitates a greater depth of processing in initially understanding the metaphor. Presumably this deeper understanding is reflected in the memory representation constructed to be used in remembering the information. It is likely that aspects of both semantic domains are present in the constructed memory representations; thus either could be used as an avenue for retrieval. There is, in fact, some evidence that information conveyed metaphorically is better remembered than the same information conveyed literally (Harris, 1979). For example, to remember (33),

(33) A flood of paperwork drowned out the weekend in Rio. the form that this is stored in memory may contain information both about the topic (bureaucratic formalities cancelling a planned trip) and the vehicle (floods). Thus both are possible avenues of retrieval. For example, if one forgot about the bureaucratic formalities, one could still retrieve that idea by remembering something about flooding and reconstructing the topic from that.

To further explore this issue of the relation of metaphor and knowledge, I would like to look more closely at a specific application of metaphor, namely its use in psychotherapy. (See Gordon, 1978, for further discussion of this problem). Since one major aim of psychotherapy of most theoretical schools is that of giving the client insight, i.e., knowledge, this is a good problem to use in understanding this issue.<sup>1</sup> Therapy tries to increase the client's self-understanding, i.e., knowledge about his or her current position in life. Many counselors and therapists say that they frequently use metaphor and that they feel it is helpful; often they are less sure exactly how it helps. I would like to explore the possibility that metaphor communicates more knowledge

to the client than would be the case with its literal equivalent.

There are several general uses of metaphors in psychotherapy. First, a metaphor can simplify events in terms of a certain concept that emphasizes some properties more than others. For example, in counseling a man having trouble communicating effectively with his wife, using the metaphor of a tennis game could help emphasize the necessity of each person taking his/her turn in the "game" of communicating.

Secondly, therapeutic metaphors can give communication an intimate or personal quality because of the concrete referents of the semantic domain of the vehicle and because of visual imagery readily evoked by concrete language. An effective therapeutic metaphor will necessarily be well chosen by the therapist or developed by him/her after being first offered by the client. As metaphors are very individual, the same metaphor will not be helpful for everyone with a given particular problem.

Third, metaphors may allow discussion of very intimate and threatening aspects of life by the client. For example, someone afraid to express emotions for fear of being out of control after expressing his real feelings might be able to discuss this problem with a therapist in the context of a closet of junk where you are afraid to pull anything out for fear everything will come tumbling after (see example below).

Fourth, metaphors can assert an affective equivalence of apparently dissimilar events or concepts. For example, the man having communication problems with his wife may be better able to understand her feelings when he is unresponsive through the use of the tennis metaphor, i.e., how would he feel playing tennis with someone who never bothered to return the ball? Since emotions are frequently important parts of the content of psychotherapy sessions,

techniques for helping the client understand feelings better are useful.

Finally, once the insight has been achieved through the use of the metaphor, it may transfer to new situations, since its nature is already somewhat abstract and generalized by virtue of its uniting two semantic domains in the world of the metaphor and by having had to determine the ground relating the topic and vehicle.

A metaphor may be used to increase knowledge or insight in therapy through a problem-solving format. By developing an extended metaphor, the client and counselor may be able to suggest possible solutions for the client's problem. For example, consider the following except loosely based on a metaphor in a novel by Guest (1976). The client is a teenage boy afraid to deal with years of repressed and unexpressed feelings.

Therapist (T): So why don't you express your feelings?  
You got feelings, don't you?

Client (C): Hell, yes, of course I got feelings.

T: Well?

C: I just can't let it out.

T: Why not?

C: It'd be a real mess. Years of stuff.

T: Like a big closet full of junk that's been packed in there year after year?

C: Yeah, that's it all right.

T: So how about opening the door?

C: I can't.

T: Why not?

C: You don't pull just one thing out of that closet. Once you open the door, it all falls out.

T: Sometimes. So what if it did?

C: Huh?

T: Suppose you open the door and it does all fall out. Every last thing in the closet, to the bare walls.

C: Oh my god! I'd be clobbered.

T: What do you mean?

C: I'd be a mess. I might be buried in it.

T: True enough. So what do you do about it?

C: Do? Oh, I don't know. Clean it up, maybe.

T: Where would you put the stuff?

C: Back in the closet, I guess.

T: Same way it was?

C: Well, I'd probably straighten it up, you know, stack everything neater this time.

T: Good idea. What happens when you finish with that?

C: Everything'd be nice and neat.

T: How about the door? Could you open and close it?

C: Oh, yeah, it'd be easy now.

T: You wouldn't be afraid to open it any more?

C: Not if everything inside was nice and orderly.

T: Then maybe it wasn't so bad that everything fell out of the closet.

C: Oh.

T: So maybe it's okay to get mad once. Maybe all your feelings do come falling out, and, sure, it makes a real mess for awhile. But messes clean up. And you end up with a nice clean closet. Maybe it's worth it.

C: Some messes take a lot of work to clean up.

T: That's okay. I'm here to help you with the job.

While it is hard to determine the actual effect of such a metaphor from merely a brief excerpt from one of many sessions of therapy, let's look at some possibilities. In the example, we have

a boy who has repressed his emotions inside for years, perhaps his entire life. At least in early stages of the therapy discussing these repressed feelings, such as anger, directly may be entirely too threatening to be productive, if in fact it can occur at all. More likely he would block the subject out. However, by developing an extended metaphor, such as the closet full of junk, the boy can explore properties of his situation in a more abstract and despersonalized fashion. For example, he can acknowledge his great fear of opening the door, the actual consequences if the door did open, and causes of action in dealing with that eventuality. It may be easier to examine his feelings about the closet than his fears about expressing anger directly.

The metaphor can also serve to facilitate problem-solving. The therapist's probing about what can be done with the junk after it falls out of the closet illustrates this. Later sessions would, of course, relate these insights directly back to the client's problem, which by then, partly due to the metaphor, may be sufficiently less threatening to be able to be dealt with directly. Thus looking at his repressed feelings as a closet full of junk can somehow increase the boy's knowledge and insight about his problem, either through providing richer knowledge associations for his cognitive representation of his own problem and/or by allowing him to retrieve other relevant information from long-term memory to use in understanding the problem.

##### 5. *Final Note*

In conclusion, the recent surge of interest in metaphor in psycholinguistics has probably so far raised more questions than it has answered, but future looks promising. Just as language is

the crowning intellectual achievement of humankind, it may be that metaphor is the largest and most impressive jewel in that cognitive tiara. At the very least, it shines too brightly to be any longer ignored by psycholinguists or linguists.

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#### Note

<sup>1</sup> We are, of course, ignoring drug therapy and behavior therapy, which do not involve insight as assumptions or goals.

## Bibliography

- Alston, W.P. *Philosophy of Language*. Englewood Cliffs, NJ: Prentice-Hall, 1964.
- Black, M. *Models and Metaphors: Studies in Language and Philosophy*. Ithaca, NY: Cornell University Press, 1962.
- Black, M. "Metaphor revisited." In A. Ortony (Ed.), *Metaphor and Thought*. Cambridge, U.K.: Cambridge University Press, 1979.
- Chomsky, N. *Language and Mind*. New York: Harcourt Brace and World, 1968.
- Gordon, D. *Therapeutic Metaphors*. Cupertino, Calif.: Meta Publications, 1978.
- Harris, R.J. "Memory for literary metaphors." *Bulletin of the Psychonomic Society* 13:246-249, 1979.
- Harris, R. J., Laher, M.A. & Marsalek, F. "Metaphors and Images: Retings, Reporting and Remembering." In Honeck Hoffman R.R. (Eds.) *Figurative Language*. Hillsdale, NJ: Laurence Erlbaum Associates, 1980.
- Richards, J.A. *The Philosophy of Rhetoric*. London: Oxford University Press, 1936.
- Smith, E.E., Rips, L.J., Shoben, E.J. "Semantic memory and psychological semantics." In G.H. Bower (Ed.) *The Psychology of Learning and Motivation*, Vol. 8. New York: Academic Press, 1974.
- Tourangeau, R. & Sternberg, R.J. "Understanding and appreciating metaphors." *Cognition* 11:203-244, 1982.
- Verbrugge, R.R. & McCarrel, N.S. "Metaphoric Comprehension: Studies in Reminding and Resembling." *Cognitive Psychology*, 9:494-533, 1977.