

The “Conduit Metaphor” Revisited: a Reassessment of Metaphors for Communication

JOE GRADY

University of California, Berkeley

1. Introduction: the “Conduit Metaphor”

The “conduit metaphor,” a hypothesized cognitive association between communication and the process of sending and receiving packages, has played a central role in the development of Lakoff and associates' linguistic theory of conceptual metaphor. Lakoff and Johnson have referred to Reddy's (1979) original presentation of this metaphor as an inspiration for *Metaphors We Live By* (1980), the ground-breaking work in which they laid down many of the principles of current theory. In this book they used the conduit metaphor as a prominent example illustrating the characteristics of conceptual metaphor. Subsequently, the conduit metaphor has been treated as one of the clearest and best established conceptual metaphors—one which bears on the understanding of speech acts (Johnson, 1987), the psychological reality of metaphor (Gibbs, 1994), the motivation for grammatical constructions (Goldberg, 1995), the evolution of lexical meaning (Sweetser, 1990), and so forth.

A close examination of data associated with this complex metaphor, however, reveals that there are important aspects of the evidence which are unaccounted for by existing analyses. In this paper I will review the features

2 / The “Conduit Metaphor” Revisited

of the conduit metaphor as described by Reddy and Lakoff & Johnson—descriptions which have served as premises for subsequent works referring to the conduit metaphor—and then show that a more refined analysis of the data offers us several important benefits:

- a clearer view of the relationship between this metaphor and other metaphors,
- an account of the types of motivation which give rise to the metaphorical conceptualizations involved, and
- an explanation for why certain elements of the source domain (the transfer of containers) are mapped onto the target domain (linguistic communication) and others are not.

More importantly, a reanalysis of the conduit metaphor data sheds light on the whole phenomenon of conceptual metaphor at a level not fully addressed in earlier accounts. As we sort out the specific conceptualizations that underlie the linguistic expressions, we arrive at a more detailed picture of how conceptual domains are related to one another, and what kinds of experiences motivate these relationships.

Reddy’s account

Reddy’s paper was built around comments written by instructors on students’ essays. These examples focused on the degree to which students succeeded in communicating their ideas, and on the presence or absence of significant content in their prose. In Reddy’s analysis, there were several metaphoric constants which characterized a great number of the examples. Chief among them were the following:

- Language functions like a conduit enabling the transfer of repertoire members [i.e., thoughts, feelings, meanings, ideas] from one individual to another.
- In writing and speech, people place their internal repertoire members [RMs] within the external signals.
- Signals convey or contain the RMs.
- In listening or reading, people find the RMs within the signals and take them into their heads.

Here are some representative examples from Reddy’s paper, showing the breadth of the conceptual correspondences involved:

- (1) It is very difficult to *put* this concept *into* words.
- (2) Harry always *fills* his paragraphs with meaning.
- (3) His words *carry* little in the way of recognizable meaning.
- (4) The passage *conveys* a feeling of excitement.

- (5) John says he cannot *find* your idea anywhere *in* the passage.
- (6) I have to struggle to *get* any meaning at all *out of* the sentence.
- (7) You know very well that I *gave* you that idea.
- (8) Your real feelings are finally *getting through to* me.
- (9) The man's thought is *buried in* these terribly dense and difficult paragraphs.

It is easy to see from these examples how a view of metaphor could arise which is very different from the traditional view of metaphor as involving unique, creative, and non-standard uses of individual words or phrases¹. The expressions here appear to arise from a common and systematic way of speaking about communication, and moreover to reflect a way of *thinking* about communication. In fact, one of Reddy's chief motivations for writing the paper was his concern that this pervasive view actually damages our communications and even our culture, since it places too much responsibility on the speaker/writer, and too little on the listener/reader, and leads to a dangerous passivity regarding the exchange of ideas.

Reddy also discusses a number of "minor" variants of the conduit metaphor—e.g., a version in which ideas are inserted into texts which may never be read or even seen, and where there is consequently no notion of transfer from one person to another.

Lakoff & Johnson's account

Following up on Reddy's (1979) article, and using their own conventions for presenting metaphoric *mappings*—i.e., systematic correspondences between different conceptual domains, such as linguistic communication and the transfer of containers—Lakoff & Johnson proposed the following breakdown of the conduit metaphor into a set of conventional correspondence pairs:

- (10) a. IDEAS/MEANINGS ARE OBJECTS
- b. LINGUISTIC EXPRESSIONS ARE CONTAINERS
- c. COMMUNICATION IS SENDING

In Lakoff and Johnson's formulation, "the speaker puts ideas (objects) into words (containers) and sends them (along a conduit) to a hearer who takes the idea/objects out of the word/containers" (p. 10). L&J's concise description captures the essence of Reddy's proposal. Reddy's minor variants fall out from the set of correspondences—e.g., expressions involving the insertion of ideas into texts are motivated by the first two correspondences above, without reference to the third.

¹This view dates back to Aristotle's *Poetics*.

Reddy’s discussion and L&J’s more formal analysis constitute the understanding of the conduit metaphor which subsequent works, including those mentioned above, have drawn from. In the next section we will see some ways in which this understanding is incomplete.

2. Problems of existing accounts

Existing analyses of the conduit metaphor are somewhat problematic both in their ability to account for linguistic data and with respect to broader issues of conceptual metaphor. These problems can be grouped into several specific areas².

Lack of experiential basis

The following citation from *Metaphors We Live By* reflects the centrality of experientialism within Lakoff & Johnson’s view of metaphor: “We feel that no metaphor can ever be comprehended or even adequately represented independently of its experiential basis...” (p. 19). It is not a trivial matter, then, if we can find no plausible experience to point to as the motivation for a particular mapping. In the case of the conduit metaphor, such an experiential basis is hard to find.

The most obvious sort of experiential basis for a metaphor is a salient overlap in our experience of the two relevant domains. For example, the proposed motivation for MORE IS UP, a metaphor which maps verticality onto quantity, is our recurring experience of observing that as the quantity of physical objects or substances increases, the level—e.g., of a pile or of the water in a glass—rises (L&J 1980, p. 16). Expressions such as “murder is *on the rise*” are ultimately motivated by experiences like these.

While our experience with the postal system could be proposed as the motivation for the conduit metaphor, since this institution facilitates both communication and the transfer of objects in containers, this proposal is not very satisfying. One reason is that the containers we mail which would seem to be the basis for most conduit metaphor expressions—i.e., containers which are “filled,” or “packed,” and whose contents might be difficult to “find” or “extract,” etc.—are packages containing objects other than letters. That is, there is a limited experiential overlap between linguistic communication and the kinds of interactions with packages referred to in conduit metaphor expressions.

²In a talk presented at the 1995 ICLA in Albuquerque, Claudia Brugman raised a number of questions about the conduit metaphor. This paper focuses on issues not mentioned by Brugman, but does address several of her concerns, including the fact that some of the conduit metaphor examples seem to be explainable by reference to much more general metaphors. One of Brugman’s interesting objections which will not be discussed here is that Reddy’s data were drawn from a very atypical sample of text, and that it was therefore misleading to draw any conclusions about the pervasiveness and harmfulness of the metaphor in the culture at large.

A second reason why the postal proposal is unsatisfying is that the experience of communication is so basic and frequent that it is hard to imagine that our conception of it is substantially derived from an activity which is relatively minor in our experience. Certainly, the vast majority of our communication does not take place via the mails. Some cultures, of course, have (or had) no tradition of writing or mailing letters whatsoever; if evidence for metaphors like the conduit metaphor could be found in these cultures and languages, this would provide further support for the claim that there must be other types of experiences which motivate the conduit metaphor data. This empirical question has yet to be investigated.

A final question about the experiential basis of the conduit metaphor, and perhaps the most obvious one, concerns how conduits and containers relate to each other. If linguistic expressions are containers, then what is it that is being metaphorically understood as a conduit, and what is the experience which unites the two concepts.

“Gaps” in the data

An additional sort of problem with the existing analyses of the conduit metaphor concerns the failure of certain elements from the source domain of package transfer to have conventional meaning in the target domain of communication. If there is really a conventional understanding of communication which is based on the experience of inserting contents into packages and sending them to recipients then salient aspects of that experience should be represented in the mapping. Yet it appears that some very prominent aspects of that experience have no conventional counterparts in the domain of communication:

- (11) ? I *opened* your essay and found the contents to be very clear.
- (12) ? She *sealed* her ideas in a lovely poem.
- (13) ? *box, envelope, courier, parcel, freight, delivery, etc.*

Sentences (11) and (12) can be interpreted, but not in a way which is consistent with the basic mapping proposed, for instance, in (10). For example, sentence (11) makes sense only on the interpretation that the essay has been physically “opened” in some way, rather than metaphorically opened—e.g., it had been sealed in an envelope. Sentence (12) implies that the poet’s ideas are in some way inaccessible, and not simply that she has included content in her poem which will later be perceived by her readers. With regard to the lexical items in (13), these standard, salient elements of the experience of transferring packages from one person to another have no conventional counterparts in the domain of linguistic communication, although it is possible to arrive at interpretations of them, of course, with a bit of imagination.

While each of these expressions may be understood, what is surprising, based on existing accounts of the metaphor, is that their interpretation should involve anything other than the straightforward operation of the

conduit metaphor mapping. (Possible motivations for some of these interpretations, involving additional metaphoric structure beyond the conduit metaphor, will be discussed below.) If the conduit metaphor doesn’t clearly license references to opening, sealing, packages of specific sorts, couriers, and so forth, then is it really based on our experience of sending objects in containers?

No account of relationships to “other” metaphors

A third sort of difficulty with current understandings of the conduit metaphor is that they do not explain how this metaphor is related to other metaphors which clearly involve some very similar conceptualizations. Consider the following examples:

- (14) Bach *packs* many ideas/moods/etc. *into* a piece of music.
- (15) The detective couldn’t *get* much information *out of* the partial shoeprint.
- (16) Tree rings *contain* the story of the region.
- (17) It was years before the fossils *yielded* any valuable information.

Each of these examples illustrates the fact that conceptualizations which seem characteristic of the conduit metaphor, as it has been understood, may underlie expressions which do not refer to communication. For instance, a piece of music is not a linguistic expression, as in (10b), and yet it can metaphorically contain ideas and feelings. Moving even further from the target domain of the conduit metaphor are expressions like those in (15)-(17), where there are no linguistic expressions, and no conscious agents responsible for the information “content” of the given objects. Nonetheless, these objects *contain* information, and the expressions look very much like some of those listed by Reddy and subsequent researchers.

Another way of stating this observation is that it is unclear whether the conduit metaphor has been analyzed at an appropriate level of generality. Is it possible that the conduit metaphor is a subcase of a more general metaphorical mapping, or that it borrows from more than one such mapping? The reanalysis presented in the next section proposes an answer to this question, and also addresses the other types of problems discussed above.

3. Reanalysis

Grady, Taub, and Morgan (1996), argued for the decomposition of many complex metaphors into more basic, independently motivated metaphors (“primary” or “primitive” metaphors) which combine into complex (or “compound”) metaphors. The motivations for such reanalyses of the data included problems with existing accounts such as those discussed in the previous section. The process of decomposition involves seeking metaphors which are very plausibly and directly motivated by experience. These

primary metaphors are also characterized by very simple mappings—i.e., they map as few elements, properties, and relations as possible, while still referring to coherent (if schematic) scenes, and still comprising enough structure to account for certain linguistic expressions. A decomposition of the conduit metaphor in just this manner yields an analysis which avoids all the problems discussed in the previous section, and also suggests ways in which concepts relating to communication might ultimately be derived from more basic physical concepts³.

In this section, a number of more basic metaphors are discussed, each of which accounts for some subset of the examples which have been attributed to the conduit metaphor. Many of these metaphors are consistent with one another, although they are independently motivated and map different pairs of concepts. These compatible metaphors may combine (or “unify,” to borrow a term from syntactic theory) to yield more specific conceptualizations of various aspects of linguistic communication, and other target domains.

CONSTITUENTS ARE CONTENTS

Consider the following examples, which seem characteristic of the conduit metaphor:

- (18) a. This writer *crams* words *into* sentences which are desperately *packed and crowded*.
 b. She *packs* a tremendous number of ideas *into* each carefully worded statement.

These examples suggest that there is a conceptualization of the constituents of sentences (either on a formal or a propositional level) as though they were *contained within* those sentences. This sort of conceptualization is not limited to the domain of linguistic forms, however:

- (19) There is both cotton and polyester *in* that shirt.
 (20) This drink is *loaded* with vitamins.
 (21) The class is *full* of bright students.
 (22) Our agenda is *packed* with events.
 (23) There are seven days *in* a week.

Examples such as these show us that constituents of structures of all kinds—not only linguistic forms—are metaphorically seen as the contents

³Hints that such an approach might ultimately be needed can be found in Lakoff & Turner’s (1989) discussion of different levels of metaphor (i.e., “generic-level” vs. more specific metaphors) and in Lakoff’s discussions of metaphoric inheritance (e.g., 1993).

8 / The “Conduit Metaphor” Revisited

of those structures. In none of these cases is actual physical containment the central concept being referred to by the spatial expressions. This is especially clear in (22)-(23) where there is no question at all of physical containers, spaces, or boundaries.

There are several related experiential bases for a metaphor like CONSTITUENTS ARE CONTENTS. One motivation has to do with basic perceptual factors: when we look at a physical object that has distinct parts—differentiated by shape, color, function, etc.—these parts all fall within a visual boundary which defines the limits of the object. In other words, the parts appear to be contained within the space occupied by the object as a whole. (See figure 1a.)

Additionally, we observe that when ingredients are added to something—e.g., cooking ingredients, pieces of a toy, thread that is woven into a textile, etc.—these constituent items are literally moved towards and then into the space occupied by the object that is being created. Even though an end product such as a meal is not literally a container, the constituents being added are understood as ending up *inside* the meal, in some sense. This situation is represented schematically in figure 1b.

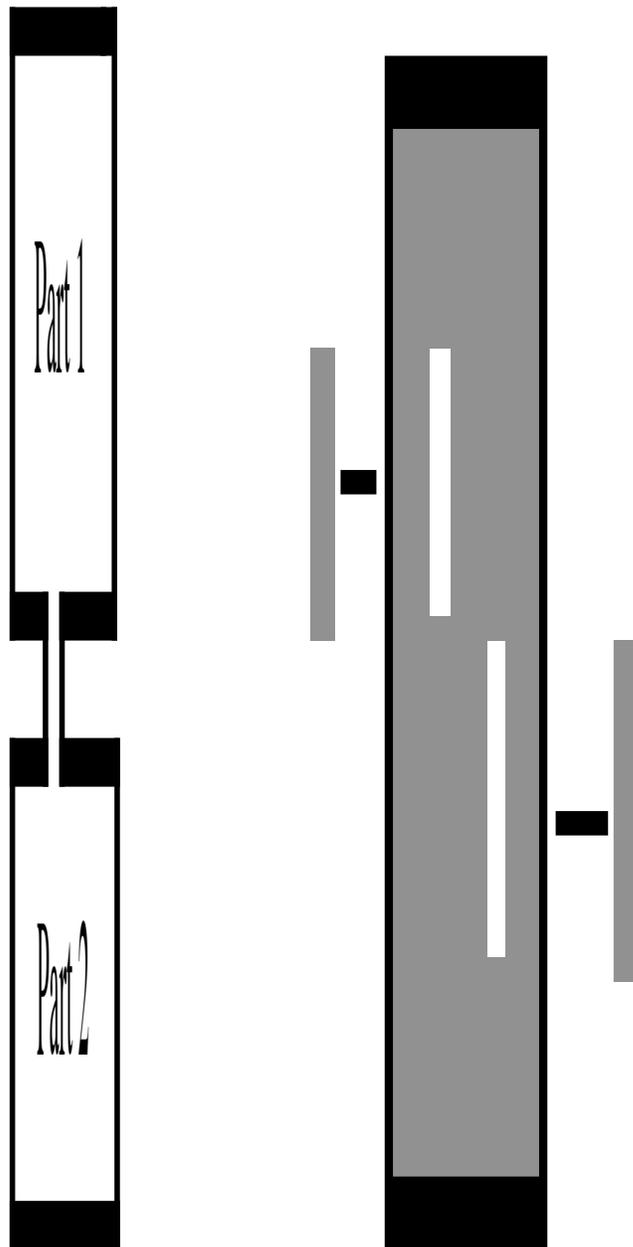


Fig. 1a

Fig. 1b

In order for these experiences to license the metaphor CONSTITUENTS ARE CONTENTS, we must also make the leap from physical constituents, as in (19)-(20), to abstract constituents. This leap is part of the very general mapping of physical structure onto abstract organization, which may be motivated by the fact that we often understand physical structure in terms of logical organization—e.g., in the case of functional part-whole structure—and may even be a consequence of neural architecture, if there are relationships between the neural structures that process our thinking about complex objects on these two levels. The motivations for a general metaphorical mapping between physical structure and abstract organization will not be discussed further here.

Given a metaphoric association between constituents and the contents of containers, sentences such as those in (18) can be explained without reference to a more specific “conduit metaphor” of communication, by the same principles that underlie examples (19)-(23). Words can be inserted into sentences, and ideas can be inserted into statements, simply by virtue of the fact that they are constituents of those structures. The quantity of constituents relative to the structure is interpreted as the quantity of contents relative to the size of a physical container—hence, *packed*, *crammed*, *empty*, etc.

A related concept which may not follow as automatically is the idea of sealing: virtually any container by definition allows contents to move in or out (at some point in time), but only certain types of containers—e.g., boxes and envelopes, as opposed to cups or bodily cavities, can be sealed. This fact may explain why *sealing* plays no conventional role in the conduit metaphor mapping.

ACHIEVING A PURPOSE IS ACQUIRING A DESIRED OBJECT

Example (6) above, repeated here as example (24), suggests that readers/listeners metaphorically remove (or attempt to remove) the RMs from a text as they read or hear it.

(24) I have to struggle to *get* any meaning at all *out of* the sentence.

This conceptualization is not accounted for by the CONSTITUENTS ARE CONTENTS metaphor discussed in the previous section, since that mapping concerns the relationships between parts and wholes, and does not license a view of those wholes as receptacles or sources of independent objects. In other words, both the motivation and the mapping for CONSTITUENTS ARE CONTENTS suggest that structures are containers only with respect to the presence of their constituents—not that they are metaphorically equated with containers in all the various uses to which containers are put.

Instead, there is a metaphor (discussed in Lakoff 1993) which can account for aspects of this expression by principles much more general than the conduit metaphor, and without reference to communication in particular. Consider examples (25)-(28):

- (25) Talks have gone well, but I haven't *gotten* any promises *out of* him.
 (26) Success has *eluded* me.
 (27) I finally *got/found/landed* a good job.
 (28) It's *in the bag*.

In each of these cases, a goal is framed as a desired object. The metaphor ACHIEVING A PURPOSE IS ACQUIRING A DESIRED OBJECT pertains not just to communication, and to arriving at satisfying interpretations of linguistic forms, but to any attempt to achieve a purpose. This metaphor is motivated by the innumerable experiences we have in which our goal is literally to acquire some object⁴. In some of the cases under consideration, then, arriving at an interpretation is equated with *getting* an object, on principles much more general than the conduit metaphor.

Containers per se are not central to this mapping, though. Instead, the metaphor focuses on the desired object and the act of acquiring it. Containers may be relevant as a type of a barrier between us and objects we desire, as in (25), but they have no special status in the mapping. For this reason, we still have not explained why we so consistently see meaning as the contents of linguistic form, as in examples (1), (2), (5), (6), etc. After all, there are other kinds of barriers besides containers, and furthermore our conceptualization of linguistic "containers" often does not seem to focus on linguistic forms as barriers to understanding. In the next section we will examine further motivations for understanding meaning as the content of a linguistic form.

INFORMATION IS CONTENTS

We saw in a previous section that constituents of a whole may be understood as contents of that whole. For instance, individual ideas are contained within larger propositions and, on the level of form, words are contained in sentences. This mapping does not explain, however, why ideas are contained in words; i.e., it does not explain the asymmetry between form and meaning, given that both might be considered "constituents" of linguistic structures. Meaning is commonly understood to reside within forms, but not vice versa.

⁴This mapping has been treated as part of the Event Structure Metaphor, e.g., in Lakoff 1993. The claim that this metaphor's psychological reality is dependent on a broad complex of other mappings is at odds with the types of analysis supported in this paper, but this issue will not be taken up further here.

Our explanation for this phenomenon should be able to account for examples (14)-(17), repeated here as (29)-(32), since they are so clearly parallel to conduit metaphor examples. Therefore we must find a mapping whose target domain is more general than the domain of linguistic communication. It is apparent from these examples that any physical configuration that allows us to deduce information (or other RMs) may be conceptualized as a container of that information:

- (29) Bach *packs* many ideas/moods/etc. *into* a piece of music.
- (30) The detective couldn't *get* much information *out of* the partial shoeprint.
- (31) Tree rings *contain* the story of the region.
- (32) It was years before the fossils *yielded* any valuable information.

(Note that this containment image is independent of any notion of an agent who might have inserted the contents into the container.)

We might try explaining these examples as instances of ACHIEVING PURPOSES IS ACQUIRING DESIRED OBJECTS, discussed above. In each example people are interested (perhaps) in retrieving the RMs encoded in the metaphorical container. Maybe any artifact or other object we use or interact with in trying to achieve a purpose is conceptualized as a container.

Unfortunately, this simple explanation does not withstand further examination. There are clear examples of purposes that can be conceived of as desired objects, but are not contained within the things that help us achieve them. For instance, a treaty isn't commonly understood as containing peace—although it can certainly be a tool for “bringing peace to a nation,” and so forth. Weapons don't have control within them, though they allow people to “gain control.”

In short, although ACHIEVING PURPOSES IS ACQUIRING DESIRED OBJECTS is relevant to some conduit metaphor examples, we still need further motivation for the containment image which applies so naturally to linguistic forms. In fact, there are several ways in which such a conceptualization could be motivated. Due to constraints of space, only a brief sketch of one very salient motivation will be offered here:

BECOMING ACCESSIBLE IS EMERGING: There are numerous linguistic examples which reflect a metaphoric association between perceptibility and location outside a container. The motivation for such a metaphor could not be more natural, of course, since perceptibility is literally correlated with location out in the open in so many cases. Examples include the following:

- (33) That sweater *brings out* the blue in your eyes.
- (34) Salt *brings out* the natural flavor of meat.

Since there is a strong literal association between perception and knowledge⁵, this sort of mapping supports the framing of linguistic meaning as being contained within linguistic forms—the emergence of these contents corresponds to our successful interpretation of the forms. In sum, linguistic meaning is framed as something which can emerge from its container (linguistic form), become perceptible, and thus become known. The following examples are from Reddy:

- (35) a. Closer reading *reveals* altogether uncharacteristic feelings *in* the story.
 b. It's as if he wrote the sentences in such a way as to *seal up* the meaning in them.
 c. John's analysis really *lays bare* the ideas in the chapter.

TRANSMISSION OF ENERGY IS TRANSFER

As we have seen, many conduit metaphor examples relate to the location of meaning within linguistic forms, to our ability to find and extract meaning, and so forth, but not to transfer. The concepts of transfer and containment seem to be independent in the data. For this reason, we need a separate account for those examples which refer explicitly to transfer, implying that meaning is a physical object that can be passed from one person to another. E.g.,

- (36) Your concepts *come across* beautifully.

One of the bases for this conceptualization is surely the fact that there is literal physical (though not necessarily direct) transfer involved in any communicative act: readers read actual books and papers which have come into their possession from some ultimate source; listeners interpret acoustic signals which arrive at their ears; Internet users have access to electric signals traveling through phone lines, and so forth. Meaning is metaphorically transferred while physical signals, notations, etc. are literally transferred. This framing of communication, by the way, explains the relevance of conduits in the earlier analyses, and demonstrates the independence of this view of communication from one involving containers and contents.

Claudia Brugman has noted (1995) that conduit metaphor examples like (36) seem to relate to a much more general mapping between results of actions, and transferred objects. Example (37), for instance, does not relate to linguistic communication, and (38) does not refer in any way to RMs or communication, but still frames an action as a metaphorical transfer.

⁵Of course, metaphors such as UNDERSTANDING IS SEEING are based on this sort of association, as well.

(37) This action should *send* the appropriate message *to* the Serbs.

(38) He *gave me* a vicious kick⁶.

Brugman refers to the target domain in such expressions as “transmission of energy,”⁷ and suggests that the general mapping between transmission of energy and physical transfer may help motivate (some) conduit metaphor examples.

RMS ARE POSSESSIONS / LEARNING IS ACQUIRING

There is plenty of linguistic evidence demonstrating that ideas, thoughts, feelings, etc. can be metaphorically possessed:

(39) This paper has *given* me new insights into equi.

(40) I *have* a much better understanding of tax law now than I did before I took this course.

(41) She *used* her knowledge of the terrain to help defeat the invaders.

These and similar examples may be motivated by our subjective experience of being able to examine, manipulate, and use the contents of our minds and our memories. In these respects the contents of mental processes seem very similar to physical possessions. If RMs are conceptualized as possessions then it follows that they can be acquired, given to us, etc.

4. Summary and Conclusion

The mappings discussed in the previous section are independent of one another, with respect to both their experiential bases and the particular linguistic expressions they license. Furthermore, nearly all of them apply to target domains much broader than linguistic communication. Since many of these mappings are mutually compatible, however, and since they all *may* apply to the target domain of linguistic communication, they form a relatively rich picture of this domain when taken together. In a sense this picture is like a patchwork or collage, with the pieces coming from very different sources. The various conceptualizations are not based on one unified scenario involving the transfer of containers from one person to another. This is why there are “gaps” in the metaphor if it is viewed as a single mapping from one domain to another. It is actually a collection of structures, each of which maps a different aspect of basic physical experience

⁶It is not clear, by the way, that such examples could be considered instances of the object branch of the Event Structure metaphor as discussed in Lakoff (1993), since kicks, messages, and ideas are not attributes.

⁷This type of transfer could also be discussed in terms of “fictive motion,” “subjective motion,” etc. following Talmy and Langacker, respectively. I will not give arguments here regarding whether such conceptualizations should properly be called “metaphor,” but I feel that there is a useful way of delineating metaphor which could include such cases.

onto some aspect of the communicative process. Following is a brief summary of the aspects of communication which are mapped according to principles discussed above:

- Large linguistic structures *contain* the smaller structures of which they are composed; writers/speakers *insert* these smaller structures (CONSTITUENTS ARE CONTENTS).
- Linguistic forms *contain* meaning (BECOMING ACCESSIBLE IS EMERGING).
- Meaning is *transferred* from one person to another via communication (TRANSMISSION OF ENERGY IS TRANSFER).
- Readers/listeners may *acquire* RMs by interacting with linguistic forms (ACHIEVING A PURPOSE IS ACQUIRING A DESIRED OBJECT, RMS ARE POSSESSIONS).

This outline explains the “failure” of certain elements of the experiential scenario of transferring containers to map onto linguistic communication. Only very specific elements of this scenario are actually mapped onto the target domain; the “scenario” itself is not the basis of the various independent conceptualizations. Notions such as the container’s appearance, sealing the container, having it delivered by a third party, unwrapping or opening the container, and so forth, simply are not relevant elements of the various conventional mappings which underlie data like Reddy’s and Lakoff and Johnson’s. Less conventional expressions can be generated and interpreted based on additional metaphoric structure—e.g., *sealing* is licensed via further elaborations of BECOMING ACCESSIBLE IS EMERGING.

The advantages of the reanalysis offered here relate both to formal aspects of metaphor theory and to an account of the structure of our conceptual system and how it arises. The advantages internal to metaphor theory include more accurate prediction of data; more economical analyses of individual expressions (since they need not be accounted for by reference to large metaphorical complexes); a clearer account of the relationships between metaphors—complex metaphors may be related in that they share some more basic mapping; and additional support for the plausibility of experiential basis. More generally, this examination of the metaphoric associations relevant to communication provides important examples of the ways in which basic elements of our physical experience shape our conceptual structure, and thereby our language.

References

- Brugman, C. 1995. Give and Take in conversation: a reinvestigation of the conduit metaphor. Talk presented at the 4th International Cognitive Linguistics Conference, Albuquerque.
- Gibbs, Raymond W. Jr. 1994. *The Poetics of Mind: Figurative Thought, Language, and Understanding*. Cambridge: Cambridge University Press.

16 / The "Conduit Metaphor" Revisited

- Grady, J. and S. Taub, P. Morgan. 1996. Primitive and Compound Metaphors, in A. Goldberg, ed., *Conceptual Structure, Discourse, and Language*. Stanford: CSLI.
- Johnson, Mark. 1987. *The Body in the Mind*. Chicago: University of Chicago Press.
- Lakoff, George and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, George and Mark Turner. 1989. *More than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.
- Lakoff, George. 1993. The Contemporary Theory of Metaphor, in A. Ortony, ed., *Metaphor and Thought*, 2d ed. Cambridge: Cambridge University Press.
- Mandler, J. 1992. How to build a baby, 2. *Psychological Review*, 99: 587-604.
- Reddy, Michael. 1979. The Conduit Metaphor: a Case of Frame Conflict in our Language about Language, in A. Ortony, ed., *Metaphor and Thought*. Cambridge: Cambridge University Press.
- Sweetser, Eve. 1990. *From etymology to pragmatics: metaphorical and cultural aspects of semantic structure*. Cambridge: Cambridge University Press.
- Talmy, Leonard. 1983. How Language Structures Space, in H. Pick & L. Acredolo, eds., *Spatial Orientation: Theory, Research, and Application*. Plenum Press.
- Turner, M. 1991. *Reading Minds*. Princeton: Princeton University Press.
- Turner, Mark. 1987. *Death is the Mother of Beauty*. Chicago: University of Chicago Press.