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A Unified Account of the Semantics of the English Ditransitive¹

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Ditransitives, or expressions of the form Subj Verb Object Object, have been traditionally classified into three distinct groups: those paraphrasable using *to*, those paraphrasable using *for*, and a third group which has no such paraphrases. This carving up of ditransitives has its roots in the transformational tradition. Ditransitives were thought to be derived from their paraphrases with *to* or *for*. Those ditransitives without such paraphrases were thought to be idiosyncratic and were largely ignored. Recent trends toward mono-stratal theories of syntax, however, encourage the search for generalities in the "surface" structure of expressions.

I would like to demonstrate that the English ditransitive can be described as a construction in the Construction Grammar sense of the word, that is, a pairing of both form and meaning. That is, I will argue that the skeletal syntax, Subj Verb Obj Obj, is paired with an identifiable semantics. The semantics involved can best be represented as a category of related meanings. In this sense the ditransitive can be viewed as a case of *constructional polysemy*: the same form is paired with different but related senses.

The semantics of the ditransitive will be shown to interact with several conventional systematic metaphors. The understanding of these metaphors turns out to be crucial to a unified account of the ditransitive's semantics.

The present work is in part a direct outgrowth of Green's (1974) work on ditransitives. In addition to providing a large database, she notices many of the generalizations I restate here. Added to her analysis are further generalizations and refinements. These additions are in part based on subsequent developments in linguistics, such as the recognition of the persuasiveness of metaphors in our everyday language, a recognition due in large part to Lakoff and Johnson (1980), as well as systematic analyses of lexical and constructional category structure as provided by Brugman (1988), Lakoff (1987), Lindner (1981), Nikiforidou (ms), Michaelis (ms) and others.

This paper proposes a necessary condition for licensing of the ditransitive construction, and that is that the semantics of the expression must conform to the network of semantics outlined below. What I am proposing, then, can be interpreted as a well-formedness constraint or a constraint on the interpretation of ditransitives. This work does not address the question of sufficient conditions for licensing the ditransitive construction, and does not rule out the possibility that the final licensing of the ditransitive is to some extent lexically idiosyncratic.

At the same time, an account which simply says that the ditransitive syntax is purely lexically idiosyncratic is rejected because the pattern is somewhat productive. For example, the new lexical item *fax* is used ditransitively as in:

1. He faxed his boss the report.

Also, hypothetical lexical items are readily adapted to the ditransitive syntax. An example comes from Marantz(1984): if we define a new verb *shin* to mean "to kick with the shin" and we use the new verb in sentences such as:

2a. Joe shinned the ball to his teammate during soccer practice.

it is quite natural for us to allow this new verb to be used ditransitively, as in:

2b. Joe shinned his teammate the ball.

Also, there are many attested examples in which people use the ditransitive syntax despite the fact that the predicate involved normally does not allow this syntax.

Finally, some predicates which do allow the ditransitive syntax, allow it only when a specific semantics is involved. For example, *owe* can be used ditransitively in:

3. He owed the bank a fortune.

However, this predicate cannot be used ditransitively when its meaning is slightly altered. For example, while we can say:

4a. He owed his present success to his upbringing.

We cannot say:

4b. *He owed his upbringing his present success.

These facts argue that there is an underlying semantic pattern that is recognized by speakers. What follows is a description of this pattern, a pattern that turns out to have prototype structure as represented below.

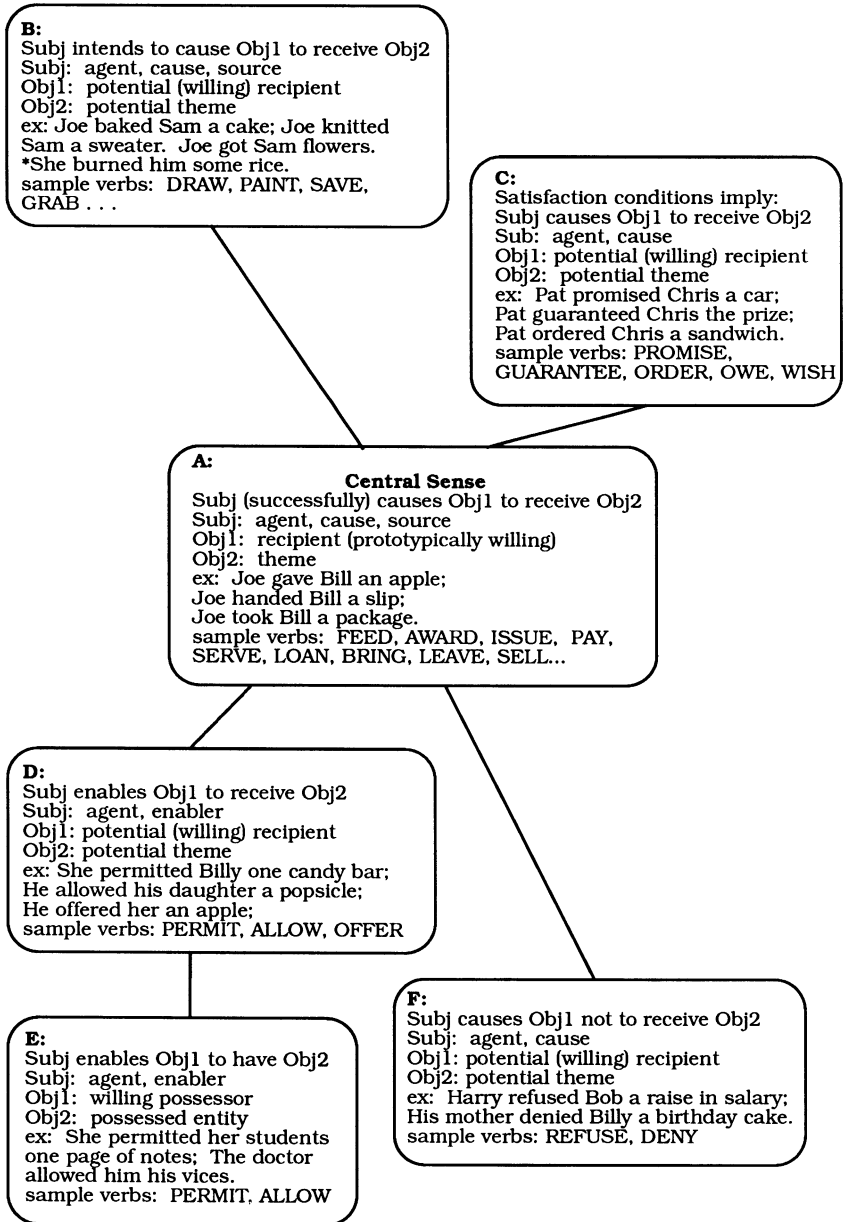


Figure 1

Central Sense

As represented in Box A of figure 1, the central sense of the ditransitive is that of transfer of a physical object to a recipient, i.e., the subject agentively causes the second object to be transferred to the first object. Examples of this sense include:

5. Jo gave Bill an apple.
6. Jo handed Bill a slip.
7. Jo took Bill a package.

and similar expressions involving the predicates *feed, award, issue, pay, serve, slip, loan, bring, leave, sell, etc.*

There are several reasons to postulate this class as the central sense. It involves concrete, as opposed to metaphorical or abstract (here, potential) transfer, and concrete meanings have been shown to be more basic diachronically (Traugott 1988, Sweetser to appear) and synchronically (Lakoff&Johnson 1980). Further, this is the class most metaphorical extensions are based on. Finally, this class is argued to be central because the other classes can be represented most economically as extensions from this sense.

There are five major classes of extensions. Each of these is based on slight permutations of the transfer schema. It is possible to show that each extension is natural by showing that the link between the central sense and the extension appears elsewhere in the grammar; and in fact, I have found such links. But for the most part the permutations on the basic transfer schema are so slight that I will not explicitly discuss these parallel links here.

An Extension based on the Relationship between Actual and Intended Transfer

The first extension is based on the relationship between actual and intended transfer. This is represented in Box B of figure 1.

This extension from the basic sense involves predicates which are not themselves transfer predicates, for example, *bake, find, and get*. Ditransitive expressions involving these predicates acquire a transfer interpretation from the semantics of the construction.

In the following examples, successful transfer is not strictly implied, as it is in the central sense, but is a *ceteris paribus* implication.

Examples include:

8. Joe baked Sam a cake.
9. Joe found Sam a sweater.
10. Joe got Sam flowers.

and similar expressions involving the predicates *draw, knit, paint, save, grab, etc.*

The majority of the expressions in this class is often said to be associated with paraphrases using *for* by derivation or lexical rule. For example, *Bill made Sam a hat* would be said to be associated with *Bill made a hat for Sam*. However, the latter sentence, *Bill made a hat for Sam*, has

many interpretations: Bill may have made a hat that Sam was otherwise obliged to make; Bill may have made the hat as a demonstration of hat making; Bill may have made the hat for himself because Sam wanted him to wear one; or lastly, Bill may have made the hat with the intention of giving the hat to Sam. It is only the last interpretation, in which intended transfer of the hat to Sam is involved, that is acceptable as a paraphrase of the ditransitive. An explanation in terms of constructional polysemy accounts for this fact.

Most theories postulate a beneficiary role for the first object position of these expressions because they are paraphrasable with a benefactive *for* phrase. This role assignment is supported by the fact that the example:

11. *She burned him some rice.

is unacceptable *except* in the context that he is thought to like burnt rice, in which case the sentence is fine.

I would like to suggest that the role assigned should actually be a conflation or conjunction of potential recipient and beneficiary since both of these semantic aspects are involved. We might describe the role assignment as that of a potential willing recipient.

The additional stipulation of willingness on the part of the first object in extension B cannot be used to distinguish this class from the other senses, because the recipient-beneficiary role is not just a property of this class, but of each of the extensions of the central sense as well. (This role assignment will hopefully be self evident in the extensions to follow.) The only case in which willingness or beneficiary status is not required of the first object is in the central sense, involving actual transfer. However, in the prototypical case of transfer, the recipient of the transfer is a willing recipient.² Therefore, it appears that a fact about the prototypical scenario involving the central sense becomes obligatory in the extensions from the central sense.

An Extension based on Satisfaction Conditions

Extension C of figure 1 is based on "satisfaction conditions" as defined by Searle (1969). Ditransitive expressions involving the predicates *promise*, *guarantee*, *order* (as in *Joe ordered himself a sandwich.*) and *owe* do not necessarily involve transfer directly; e.g., *Sue promised Frankenstein a kiss* does not imply that Sue gives Frankenstein a kiss. However, transfer is implied by the "satisfaction conditions" associated with each predicate. A *satisfied* promise for example does imply that the promisee receives whatever is promised.

A further difference separating this class (as well as the rest of the extensions) from the central sense is that in these examples it is not necessary for the second object to move from the subject; that is, the subject is still understood to be the cause of the transfer, but is not necessarily understood to be the source of the transfer.

An interesting case of an extension based on satisfaction conditions involves the predicate *wish* as in:

12. I wish you all the best.

Here the subject is not actually causal. However, due to a kind of superstition, this is exactly what this expression is meant to convey. To ask someone to wish you good luck is to ask for the person's help in attaining for yourself good luck. Thus one can say, after some mishap,

13. I wish someone had wished me good luck.

Extensions Based on Enablement

A third class of Extensions is based on enablement; this is represented by Box D of figure 1. Expressions in this class involve predicates which select for a subject which is not causative but rather *enables* reception to occur. Examples of such predicates are *offer*, *allow*, and *permit* as used in expressions such as:

14. She permitted Billy one candy bar.

15. He allowed his daughter a popsicle.

16. He offered her an apple.

This class is actually further extended when the subject allows the first object to keep the second object. Box E of figure 1 represents this class. In these examples, possession and not reception is involved. Examples of this class include:

17. She permitted her students one page of notes.

18. The doctor allowed him his vices.

A final literal Extension based on Negation

Some ditransitive expressions express the negation of transfer, for example:

19. Harry refused Bob a raise in salary.

20. His mother denied Billy a birthday cake.

Here, transfer is relevant in that the possibility for successful transfer has arisen, but by virtue of the specific semantics of the predicates involved, the subject refuses to act as the cause of the reception. Box F of figure 1 represents this class.

Metaphorical Transfer

Orthogonal to all of these extensions are extensions based on conventional systematic metaphors. The source domains of the metaphors involved are the central sense.

A major source of ditransitives is a metaphor involving effects, construed as objects, *traveling across* from their cause to the affected party, the "recipient." Evidence for the existence of this metaphor, independent of the ditransitive construction, includes expressions of the following kind:

This is the *source/origin* of the effect., meaning "This is the cause of the effect."

The effect was *blocked*.

They *held off the negative effects* for as long as possible.

The effect *came from* the cause.

This metaphor licenses examples:

21. The rain brought the farmers relief.
22. She gave him a pain in the neck. (The pain is also metaphorical, but that is not relevant here).
23. The paint job gave the car a higher sale price.
24. The tabasco sauce gave the chili some flavor.

This class can be represented as follows:

Metaphor: Causes are Sources of Their Effects

Source Domain: A

Target Domain:

Subject is the cause of Obj1 being affected by Obj2
 Subj: cause
 Obj1: affected party
 Obj2: effect
 ex: The rain brought the farmers relief.
 She gave him a pain in the neck.
 The paint job gave the car a higher sale price.

The claim that this particular metaphor motivates the syntax of the above examples is supported by the polysemy of each of the predicates involved. The predicates *give* and *bring* are used in the above examples to imply causation, but both of their central senses involve *transfer*. The link between these two senses is accounted for by appeal to the metaphor. *Give* and *bring* here involve the "transfer" of effect.

This metaphor has an important implication for the understanding of the construction as a whole. First notice that most ditransitives require a volitional subject. The intention must extend so that not only is the action of the verb performed agentively, but it is also performed with the intention of causing the first object to receive the second object. For example,

- 25 Joe painted Sally a picture.

implies that Joe intended the picture to be for Sally. It cannot be the case that Joe painted a picture (intentionally), and that Sally happened to receive the picture. Similarly,

26. Bob told Joe a story

is only acceptable in the context that Bob intends to tell Joe a story. It cannot be the case that Bob tells the story to someone else and Joe just happens to overhear. Notice further that each of the verbs mentioned so far selects for an agentive subject. These facts might tempt us to conclude that the subject of the ditransitive must be agentive. But we have just seen examples where this requirement is not met. Consider again examples 21-24, or the following examples:

27. The medicine brought him relief.
28. His wide grin told his buddy the whole story.

It turns out that the subject is not necessarily volitional in just those cases where the transfer is understood metaphorically by the Causation metaphor. Therefore, recognition of the metaphor allows us to state the generalization of volitionality and still account for the cases where the volitionality requirement is not met.

Another metaphor, the Conduit Metaphor, described and named by Michael Reddy (1979) involves communication *traveling across* from the stimulus to the listener. The listener understands the communication upon "reception." Evidence for the metaphor includes:

He *got the ideas across* to Jo.

His thoughts *came across* from his speech.

Jo *received* the information from Sam.

Jo *got the information* from Bill.

This metaphor licenses the following examples:

29. She told Jo a fairy tale.

30. She wired Joe a message.

31. She quoted Jo a passage.

32. She gave Joe her thoughts on the subject.

This class can be represented thus:

Metaphor: Conduit

Source Domain: A

Target Domain:

Subj communicates Obj2 to Obj1 Subj: speaker Obj1: listener Obj2: information ex: She told him a story. She wired Joe a message. <u>She gave Joe her thoughts on the subject.</u>

The final metaphor I will discuss, but by no means the last metaphor involved in the ditransitive, is a metaphor involving understanding forces as being propelled entities. The endpoint of the force is understood as the recipient of the entity. Evidence for the metaphor includes:

He *blocked* the kick.

He *caught the full force* of the blow.

A blow *struck* him in the head.

The punch was thrown.

Punches were flying.

Bob *received* a punch/kick/slap/tug from Jo.

This metaphor licenses the following expressions:

33. Jo gave Bob a punch.

34. Jo gave Bob a kick.
 35. The men gave the grand piano a push.

This class can be represented as follows:

Metaphor: Forces are Propelled Entities

Source Domain: A

Target Domain:

Subj initiates a force (Obj2) that affects Obj1
 Subj: initiator of force
 Obj1: affected party
 Obj2: force
 ex: Joe gave Bob a punch. Bob gave Joe a kick.
 The men gave the grand piano a push.

There are several other metaphors involved in the construction, which unfortunately I do not have space to discuss here. Hopefully the metaphors just described will give an idea of how the analysis would work.

On the Notion "Recipient"

Noticing that a recipient is involved in ditransitive expressions may be a first step toward motivating the double object syntax of the construction. Those interested in the semantics of the direct object since Jakobson have noted that *recipients* of force and effect make for good direct objects (Jakobson 1938, Langacker 1987, Rice 1987). (Of course this is not to say that all direct objects are recipients; clearly the objects of cognition verbs such as *believe*, *see*, and *know* would present difficulties for such a claim.)

Apparent Exceptions

Finally we come to cases that appear exceptional.

Cost does not fit the pattern outlined above for two reasons. First it does not require a volitional subject. Secondly, the first object does not receive the second object, but rather potentially loses the second object. However, *cost* also differs from the other predicates discussed in that it is not passivizable:

*I was cost ten dollars by this sweater.

This fact may indicate that the first object complement of *cost* should not be considered an object, and that therefore *cost* should not be included in the class of ditransitive predicates.

Ask is exceptional in expressions such as:

37. She asked Sam his name.
 38. She asked Sam a favor.

These clearly do not imply that Sam potentially "receives" his name or a favor. It is possible, however, that the second objects in examples 37 and 38 should be analyzed as metonymic for the clausal *what her name was* and the phrasal *for a favor* respectively. If analyzed this way, they would fall outside the domain of ditransitives. Another possible explanation for example 38 is that the expression is simply idiosyncratic. Notice the

pattern is not productive:

- 39. *He asked her some help.
- 40. *He asked her five dollars.

Forgive and especially *envy* as used in:

- 41. He forgave her her sins.
- 42. He envied the prince his fortune.

are also exceptional. The subjects in these cases are not causal and no reception is involved. However, these predicates have illuminating semantic histories. *Forgive* and *envy* historically had senses that were closely related to *give*. *Forgive* used to mean "to give or grant" (OED:452). *Envy* used to mean "to give grudgingly" or "to refuse to give a thing to" (OED:232). This of course is not evidence that *forgive* or *envy* are part of the synchronic semantic pattern outlined above. But the historical facts do suggest that these predicates were at least at one time associated with this sort of pattern. These facts also of course suggest that the construction can occasionally be frozen without continuing reference to the original semantics.

However, it seems reasonable that syntactic change should tend toward patterns that are more transparent to the speaker. If the construction with the semantics I have outlined is psychologically real, then it would be natural for odd cases of ditransitives involving *forgive* and *envy* to drop out of use. And in fact I myself find archaic sounding sentences involving *forgive* and *envy* much more acceptable than modern-sounding sentences. For example:

- 43a. She forgave him his sins.
- 43b. ?*She forgave him his goof.
- 44a. She envied him his vast fortune.
- 44b. ?*She envied him his extensive stock portfolio.

Conclusion

This work attempts to add an additional example to the growing body of evidence that suggests that constructions involving pairings of syntax and semantics provide rich areas of generalizations. Generalizations based on radial categories and not necessarily classical categories of necessary and sufficient conditions are accepted as legitimate based on recent empirical research into the nature of human categories (for references and discussion see Lakoff 1987). This type of generalization allows us to view the ditransitive as a case of constructional polysemy. Specifically, the semantics of the ditransitive construction has been shown to be based on transfer and capable of interacting with the semantics of individual predicates, yielding a family of different but related semantic conditions. So, while *give* lexically codes transfer, expressions involving other predicates, for example *draw*, take on a transfer interpretation by virtue of appearing in the ditransitive construction.

Further work is necessary to investigate sufficient conditions for licensing the ditransitive. I hope to have demonstrated the validity of further research into ditransitives as a unified construction with

identifiable polysemic semantics.

Endnotes

1. Extremely helpful criticisms and suggestions were made by Claudia Brugman, Jane Espenson, Charles Fillmore, Don Forman, Jean-Pierre Koenig, Laura Michaelis, Eve Sweetser, and especially George Lakoff. All the usual disclaimers apply.
2. In support of this claim, notice that expressions whose predicate codes a malafactive argument are never paraphrasable as ditransitives. For example, in the expressions,
 1. She forced more work on him.
 2. She dumped her beer on him.

transfer is implied; i.e., the other conditions on the central sense are met; and yet these expressions are completely unacceptable as ditransitives:

- 1'. *She forced him more work.
- 2'. *She dumped him her beer.

(Remember that once the assumption that ditransitives are derived from paraphrases with *to* or *for* is relinquished, these examples fall into the domain of potentially ditransitive expressions.)

Further notice that entities which are incapable of being willing recipients are odd as first objects in ditransitive expressions:

3. ?The bereaved widow gave the corpse a kiss.
3. See for example Fillmore, Kay, O'Connor(1988), Lakoff(1987).

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