

Thematic Constraints on the Dative Alternation in English

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Thematic Constraints on the Dative Alternation in English*

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1. Some Constraints on the Dative Alternation

In English some verbs allow the so-called dative alternation in which both the prepositional dative construction (the DP-PP frame) and the double object construction (the double DP frame) are acceptable. There are some cases, however, in which the DP-PP frame is prohibited and only the double DP frame is allowed, although a typical dative-alternation verb is involved.

Green (1974) observes that the verb *give* permits only the double DP frame when it takes some types of direct object. One type of direct object that makes the double DP frame obligatory for *give* is provided by a de-verbal (zero-derived) action nominal (Green 1974: 83-84).

- (1) a. Mary gave John a kick.
b. *Mary gave a kick to John.
- (2) a. Mary gave John a punch in the nose.
b. *Mary gave a punch in the nose to John.

Another type of direct object that requires the double DP frame is a nominal that denotes some physical or psychic condition like disease, pain, and feeling (Green 1974: 82-83).¹

- (3) a. Mary gave John a cold.
b. *Mary gave a cold to John
- (4) a. Mary gave John a pain in the neck.
b. *Mary gave a pain in the neck to John

- (5) a. Mary gave John a sense of well-being.
 b. ?*Mary gave a sense of well-being to John.

An abstract, ideative nominal like *idea* and *clue* requires the double DP frame, as well, if the sentence involves a non-volitional subject (Green 1974: 84).²

- (6) a. Mary's behavior gave John an idea.
 b. *Mary's behavior gave an idea to John.
 (7) a. Mary's behavior gave John the clue to the Sphinx's riddle.
 b. *Mary's behavior gave the clue to the Sphinx's riddle to John.

A parallel phenomenon is observed with other dative-alternation verbs than *give*, as well. The relevant examples have been given by a number of scholars including Oehrle (1975), Johnson (1992), and Pesetsky (1995). In each of the sentences in (8)-(12), the double DP frame in (a) is grammatical, whereas the DP-PP frame in (b) is not. The pair in (12) shows that the same effect emerges with a verb that takes *for* rather than *to*.

- (8) a. Lipson's book taught Mary Russian.
 b. *Lipson's book taught Russian to Mary. (Oehrle 1975: 71)
 (9) a. The war brought John only grief.
 b. *The war brought only grief to John. (ibid.)
 (10) a. Your article showed Henry a problem.
 b. *Your article showed a problem to Henry. (Johnson 1992: 272)
 (11) a. The manual told Susan everything.
 b. *The manual told everything to Susan. (ibid.)
 (12) a. Hard work got Mary the prize.
 b. *Hard work got the prize for Mary. (Pesetsky 1995: 194)

In this paper I will account for this kind of restriction on the dative alternation in thematic terms. More specifically, I will give an explana-

tion based on the crucial use of the Structural Realization Principle proposed by Kaga (2000). Before that, however, I will review some previous analyses that have attempted to solve the same problem, and point out some difficulties with them.

2. Previous Analyses

Some recent attempts have been made to accommodate (part of) the facts presented above. For example, Pesetsky (1995) and Fujita (1996) try to give a syntactic account to the grammaticality contrast found in a pair of sentences of the (6)-(12) type. The point of their account lies in their proposal that Causer subjects like *Mary's behavior* in (6)-(7) and *Lipson's book* in (8) be distinguished thematically from Agent subjects like *Mary* in (i) of note 2, and the former be base-generated in a lower position than the latter (a position lower than Goal and Theme as well as Agent for Pesetsky, and the [Spec, VP₂] position for Fujita). Pesetsky accounts for the contrast in question by assuming that the non-affixal prepositional head *to* that appears in the DP-PP frame, as opposed to the null affixal head *G* that occurs in the double DP frame, blocks the required movement to the main verb of a null causative affixal morpheme, called CAUS, that introduces a Causer argument. Fujita explains that the DP-PP frame, unlike the double DP frame, prohibits the Causer subject because the Minimal Link Condition (MLC) blocks LF movement of the direct object to the specifier position of Agr_P where it is Case-checked, owing to the presence of both the Causer argument (or its trace) in [Spec, VP₂] and the prepositional object in [Spec, Agr_P].³

A syntactic account along the lines of Pesetsky (1995) and Fujita (1996) can accommodate data of the (6)-(12) type that involves the Causer subject (and, furthermore, data of the (3)-(5) type if the subject is interpreted as Causer), but such an account, as Takami (1997) points out, cannot be easily extended to data of the (1)-(2) type that, though involving the Agent subject rather than the Causer, shows a parallel contrast in grammaticality between the double DP frame and the DP-PP frame. Here I

will not examine in any detail the potential capacity of a syntactic account along the Pesetsky-Fujita line. However, it is reasonable to say that it would be more desirable if there is a unitary account available that can cover data of the (1)-(2) type as well as those of the (3)-(5) and (6)-(12) types.

Takami (1997) attempts to account for the grammaticality contrast observed in a pair of sentences like (1)-(12) from the standpoint of cognitive grammar. Following researchers such as Langacker (1991), Croft (1991), and Goldberg (1995), he gives distinct characterizations to the *to*-dative construction and the double object construction. The former is a construction that emphasizes the path traversed by the Theme entity denoted by the direct object, with the oblique complement being primarily understood as the Goal toward which the moving entity is directed, while the latter construction, on the other hand, emphasizes the possessive relationship resulting from the process of the Theme entity being received by a human entity represented by the indirect object, which is then generally interpreted as Recipient or Possessor, not as Goal. On the basis of these assumptions, Takami (1997) accounts for the grammaticality contrast in question by saying that sentences like (1)-(12), irrespective of whether the subject is Agentive or Causative, describe the situation in which the indirect object is interpreted as Recipient or Possessor, not as Goal, and therefore those sentences are grammatical in the double object form, but not in the *to*- (or *for*-) dative form. For example, sentence (13a) is paraphrased as 'John got cirrhosis from drinking', indicating that the indirect object is appropriately interpreted as a recipient (or possessor) of the disease.⁴ Thus, the double object construction in (13a) is grammatical, but the *to*-dative construction in (13b) is not.

- (13) a. Drinking gave John cirrhosis.
 b. *Drinking gave cirrhosis to John.

Is Takami's explanation feasible? In particular, is his characterization of the indirect object of the double DP frame as Recipient or Possessor

valid? With respect to (13a), it might be valid, in light of its paraphrasability noted just above. How about sentences of the (1)-(2) type, however? Citing sentences like (14)-(15), Takami observes that “the indirect objects *Mary* and *him* in [(14a)] and [(15a)] are interpreted as recipients (possessors) of a kick and a parting glance, respectively” (1997:39).

- (14) a. John gave Mary a kick.
 b. *John gave a kick to Mary.
- (15) a. She threw him a parting glance.
 b. *She threw a parting glance to him.

Takami characterizes the double object form as a construction that emphasizes the resulting state of possession. In what sense, however, do Mary and he possess a kick or a parting glance in the situations described by (14a) and (15a)? Such a way of looking at the situations seems to be against our normal understanding of the world, although it may be the case that some effect of a kick or a parting glance, not a kick or a parting glance itself, can be left in Mary or him. Furthermore, how about sentences like (16)-(17), whose indirect object is inanimate?

- (16) a. We gave the door a kick. (Green 1974: 102)
 b. *We gave a kick to the door.
- (17) a. Gibson gave the rope a pull. (Cattell 1984: 37)
 b. *Gibson gave a pull to the rope.

To account for the contrast in grammaticality between (16-17a) and (16-17b), Takami would have to analyze the indirect objects *the door* in (16) and *the rope* in (17) as Recipients or Possessors.⁵ But this characterization is obviously unnatural in view of their inanimateness. There is no ordinary sense in which an inanimate entity like a door and rope “possesses” a kick or a pull. As seen, Takami’s (1997) cognitive approach has difficulty in characterizing the indirect object of the double DP frame with the unitary notion of Recipient or Possessor, which seems to be inappropriate at least

with respect to examples like (14)-(17).

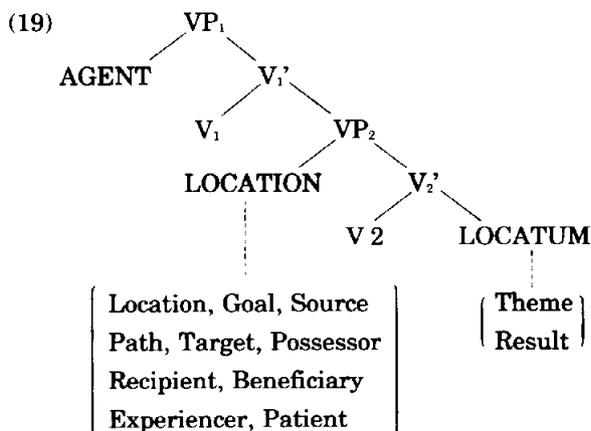
Takami's (1997) characterization of the indirect object as Recipient or Possessor is appropriate for accounting for prototypical double object constructions like (18a-b):

- (18) a. John gave Mary a book.
 b. John sent Mary a package.

This does not mean, however, that one is justified in extending the characterization to 'non-prototypical' cases of double object construction like (14)-(17). In fact, such an extension is quite inappropriate, I believe, because it stretches the coverage of the term Recipient or Possessor beyond the reasonable limit.

3. Thematic Structure and Structural Realization Principle

Kaga (2000) assumed the thematic structure in (19), a thematic hierarchy based on the Larsonian VP-shell (see also Kaga 1998, 1999), and proposed the Structural Realization Principle in (20), a principle on the syntactic realization of LOCATION arguments.

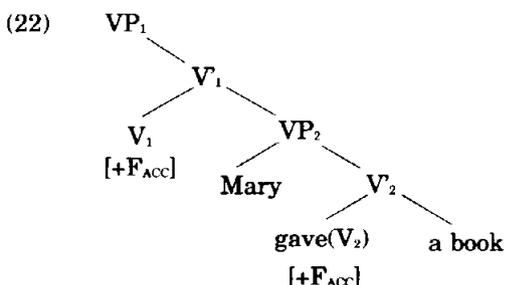


(20) *Structural Realization Principle*

Instances of simple LOCATION are realized as PPs, while those of affected LOCATION are realized as DPs.

On the basis of the thematic structure in (19), I assume that a double object construction like (21) is associated with the VP structure in (22) at a certain intermediate stage of the derivation (see Ura 1996 and Takano 1998).

(21) John gave Mary a book.

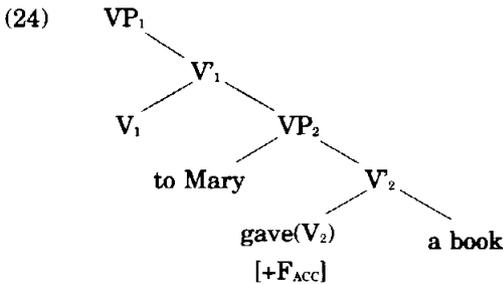


I also assume a Case checking theory of the minimalist approach (Chomsky 1995, etc). In the structure of (22) both of the upper and lower Vs have a feature [+F_{ACC}] for checking accusative Case of the specifier and complement arguments of VP₂. So the double DP frame is possible. To be more concrete, in the present minimalist approach the two accusative DPs are licensed through the following operations: (i) the lower verb (overtly) raises to adjoin the upper verb, making a verbal complex with two Case-checking features, (ii) the verbal complex (more exactly, the Case-checking feature of V₁) (covertly) attracts and checks accusative Case of *Mary*, and (iii) the verbal complex (more exactly, the Case-checking feature of V₂) (covertly) attracts and checks accusative Case of *a book*.

On the other hand, I assume that a prepositional dative sentence like (23) appears in the VP structure where the upper verb lacks a Case-

checking feature, as in (24):

(23) John gave a book to Mary.



In short, in the present analysis a dative-alternation verb like *give* has the lexical property that the lower V always carries a Case-checking feature, but the upper V is optional in that respect. I assume, following Takano's (1996, 1998) proposal, that the Theme argument in the DP-PP frame has to be scrambled over the PP phrase for the reason of Case checking. That is, if the scrambling does not happen, the Case feature of the Theme DP cannot be checked due to the Minimal Link Condition; the PP (more exactly, the prepositional object in it) occupying the [Spec, VP₂] position is closer to the verbal complex than the Theme DP, and thus prohibits the DP from being attracted and Case-checked by the verbal complex. In the present approach, therefore, a sentence like (23) with DP-PP frame goes through the following operations: (i) the Theme *a book* is scrambled over the PP *to Mary*, (ii) the lower verb (overtly) raises to the upper verb, making a verbal complex, and (iii) the verbal complex (more exactly, the Case-checking feature of V₂) (covertly) attracts and checks accusative Case of the scrambled DP *a book*.⁶

Under the present analysis, the double DP frame in (21) and the DP-PP frame in (23) are thematic paraphrases in the sense of Baker (1988). That is, they obey the UTAH on the level of "macro"-thematic roles in that both of the dative DP and the Goal PP are LOCATION arguments and appear in the same [Spec, VP₂] position. But the two frames are distin-

guished on the level of “micro”-thematic roles. The dative DP of the double DP frame is characterized as an instance of Recipient or Possessor, while the PP of the DP-PP frame is regarded as an instance of Goal. This distinction on the micro-role level accounts for the often-noted non-synonymy of the two frames (cf. Green 1974, Oehrle 1976, Jackendoff 1990, Goldberg 1995, Baker 1997, and many others). The double DP frame implies more strongly than the DP-PP frame that the transfer of possession denoted by the verb is successful. For example, (25a) suggests that the ball actually reached John, whereas (25b) does not.

- (25) a. I threw John the ball.
 b. I threw the ball to John.

Besides, the double DP frame, but not the DP-PP frame, is subject to the animateness restriction in normal cases. A place-denoting expression like *New York* cannot appear as the dative argument of the double DP frame, as shown below:

- (26) a. John sent Bill/*New York the package.
 b. John sent the package to Bill/New York.

The Structural Realization Principle in (20) provides us of the relevant thematic and categorial distinction of the two frames in question. LOCATION arguments are divided into two groups: simple and affected LOCATIONS. The first includes such micro-roles as Location, Goal, Source, Path and Target, and the second such micro-roles as Possessor, Recipient, Beneficiary, Experiencer and Patient. Given this twofold distinction, it follows that the dative phrase of the double DP frame, being a DP, is a realization of an affected LOCATION role like Possessor, Recipient, (or Beneficiary), thus accounting for the fact that the double DP frame implies the successful transfer of possession and normally excludes a place-denoting expression. In contrast, the *to*-phrase of the DP-PP frame, being a PP, is a realization of a simple LOCATION role like Goal,

hence no such implication or restriction being imposed on the DP-PP frame.

4. Explanation

Given the Structural Realization Principle in (20), the contrast in grammaticality found in a pair of sentences of the (1)-(2) type follows easily. Let us look at the pairs in (1)-(2), repeated here for convenience:

- (1) a. Mary gave John a kick.
- b. *Mary gave a kick to John.
- (2) a. Mary gave John a punch in the nose.
- b. *Mary gave a punch in the nose to John.

Notice that in this type of sentence, the dative object *John* should be interpreted as bearing a role of Patient (in the broad sense), in view of the fact that the expressions *give a kick* and *give a punch* have roughly the same semantic content as the simple transitive verbs *kick* and *punch*, respectively, whose object is interpreted as Patient. The thematic status of Patient, an instance of affected LOCATION in our assumption, makes *John* compatible only with the double object frame involving the DP realization of it, in accordance with the Structural Realization Principle in (20). Hence the grammaticality of (1-2a) and the ungrammaticality of (1-2b).

Notice that this analysis can easily accommodate data like (16)-(17), which include an inanimate indirect object like *the door* and *the rope*. It is natural to interpret inanimate things like a door and a rope as Patient in a situation described in (16)-(17), though it seems unnatural to interpret them as Recipient or Possessor in the same situation. The thematic status of the door and the rope as Patient accounts for the grammaticality of the double object variants in (16-17a) and the ungrammaticality of the *to*-dative variants in (16-17b).

A parallel account applies to the rest of the data presented above as

well. *John* in (3) and (4) is appropriately interpreted as Patient or Experiencer, in view of the fact that those sentences describe the situations in which John suffered from a cold and a pain in the neck, respectively, while *John* in (5) is understood as Experiencer or Beneficiary, in light of the fact that what happened to John was enjoy a sense of well-being.

- (3) a. Mary gave John a cold.
- b. *Mary gave a cold to John.
- (4) a. Mary gave John a pain in the neck.
- b. *Mary gave a pain in the neck to John.
- (5) a. Mary gave John a sense of well-being.
- b. ?*Mary gave a sense of well-being to John.

In each of these sentences the dative *John* has the thematic status of affected LOCATION, and thus it has to be realized as a DP, not as a PP, in accordance with the principle in (20). This is why the prepositional dative sentences in (3-5b) are ruled out as ungrammatical.

Consider the sentences in (6)-(12), repeated here, all of which involve a non-volitional subject.

- (6) a. Mary's behavior gave John an idea.
- b. *Mary's behavior gave an idea to John.
- (7) a. Mary's behavior gave John the clue to the Sphinx's riddle.
- b. *Mary's behavior gave the clue to the Sphinx's riddle to John.
- (8) a. Lipson's book taught Mary Russian.
- b. *Lipson's book taught Russian to Mary.
- (9) a. The war brought John only grief.
- b. *The war brought only grief to John.
- (10) a. Your article showed Henry a problem.
- b. *Your article showed a problem to Henry.
- (11) a. The manual told Susan everything.
- b. *The manual told everything to Susan.
- (12) a. Hard work got Mary the prize.

- b. *Hard work got the prize for Mary.

Notice that in these examples, the dative objects should be interpreted as instances of affected LOCATION, rather than those of simple LOCATION. For example, *John* in (6)-(7) is interpreted as Recipient or Experiencer and *Mary* in (12) as Recipient or Beneficiary. Hence all of these sentences need to realize their dative object as a DP, in accordance with the Structural Realization Principle in (20), resulting in the ungrammaticality of the prepositional variants in (6-12b).

For an account along these lines to be successful, it is necessary to answer the important question. As observed in note 2, the volitional agent subject makes a prepositional dative construction of the *give an idea* type acceptable.

- (27) Mary gave an idea to John.

Likewise, the agent subject removes unacceptability from the DP-PP variant of causer subject sentences like (8)-(12), as in :

- (28) a. John taught Russian to Mary.
 b. Mary brought only grief to John.
 c. You showed a problem to Henry.
 d. John told everything to Susan.
 e. Bill got the prize for Mary.

Why is the DP-PP frame with the agent subject acceptable, in contrast to the DP-PP frame with the causer subject? Or, in other words, what is the crucial difference between sentences with the agent subject and the causer subject?

The DP-PP constructions with the agent subject in (27)-(28) describe the subject's action of transferring something, whether it is information of some kind, feeling, concrete things, or others. A person introduced by the dative expression can be involved in this transferring event as a Goal par-

ticipant that serves as the endpoint of the path traversed by the transferred entity. Such a participant is interpreted thematically as an instance of simple LOCATION and, thus, realized as a PP, accounting for the grammaticality of (27)-(28). In contrast, the constructions with the causer subject in (6)-(12) do not represent a transferring event, in spite of the fact that verbs of transfer are adopted.⁷ Those constructions, instead, describe the event in which a person introduced by the dative expression gets something (information, feeling, concrete things, or others) by exercising his/her mental or physical faculties. For example, (7) describes the event in which John found the clue to the Sphinx's riddle through observing Mary's behavior, (8) the event in which Mary learned Russian through studying Lipson's book, and (12) the event in which Mary got the prize through doing hard work. In these examples, the person introduced by the dative phrase cannot be seen as a Goal participant, because that person takes on the important role as an exerciser of his/her mental or physical faculties, rather than a role as the mere endpoint of the path. Hence the ungrammaticality of the DP-PP constructions with the causer subject in (6-12b).

5. Conclusion

In this paper I have accounted for non-alternant dative constructions from a thematic point of view. More specifically, I have attributed the reason that the DP-PP frame is prohibited in a certain dative construction to the Structural Realization Principle. I have also pointed out some problems with the recent literature.

Notes

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Research from the Ministry of Education, Science and Culture (Head: Ryuichi Washio, #12410126).

¹ This type of direct object permits an inanimate (non-volitional) noun to occur as the subject, as in :

- (i) a. The exam gave Mary a headache.
- b. *The exam gave a headache to Mary. (Oehrle 1975: 71)
- (ii) a. Drinking gave John cirrhosis.
- b. *Drinking gave cirrhosis to John. (Takami 1997: 23)

² A volitional subject makes the DP-PP variant of this type acceptable, as shown below :

- (i) a. Mary gave an idea to John.
- b. Mary gave the clue to the Sphinx's riddle to John.

³ Fujita extends the mechanism of object Case checking to prepositional objects and posits a category of Agr_P that is responsible for Case checking of the prepositional object. He assumes that Agr_P is generated above the VP_s category containing the direct object argument and that its specifier attracts the prepositional object in LF.

⁴ Takami (1997) assumes that the double object construction implies the existence of mental contact between the recipient and the transferred entity, and says of (13a) that John has a mental contact with cirrhosis and this is embodied by the fact that John "is clearly aware of the fact that he got cirrhosis from drinking" (p. 43). This observation, however, seems to be incorrect. The acceptability of (i) below shows that (13 a) is true even under the interpretation that John is unaware of the fact that he got the disease.

- (i) Drinking gave John cirrhosis, but he didn't notice it.

⁵ Takami adduces examples like (ia-b) to show that an inanimate object like *the door*, unlike a human object like *Mary*, makes the *to*-dative variant acceptable.

- (i) a. Mary gave another kick to the door into the shed.
- b. John gave another violent kick to the door to her room.
- Cf. *John gave a kick to Mary.

In his analysis, the acceptability of (ia-b) would indicate that an inanimate entity like a

door can be interpreted as Goal, a mere endpoint for the mover, as well as Recipient or Possessor. This reasoning, however, seems to be dubious. As Takami himself observes (1977: 48), in both of (ia-b) *kick* is modified by *another*, not the indefinite article *a*, and, furthermore, sentence (ii) with the indefinite article DP *a kick*, in contrast to (ia-b) “sounds funny because it’s like *John gave a present to the door.*”

- (ii) (*)John got so upset that he gave a kick to the door to her room.

This indicates that examples like (ia-b) involving a modification by *another* should be distinguished from a *give* ~ *a kick* construction that requires the double object form. As for the exact factors that make sentences (ia-b) acceptable, I have to leave them to future research.

⁶ I assume that the Case feature of the prepositional object *Mary* is licensed/checked internal to PP (cf. Takano 1996, 1998).

⁷ In the present theory, the use of the verbs of transfer in (6)-(12) is regarded as a metaphorical one. In other words, in (6)-(12) the non-transferring event is expressed metaphorically as if it was a transferring one, using verbs of transfer.

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