Notes on Derivative Syntax*

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1. Introduction

In some of its secondary uses, a word or word-class can take on syntactic and semantic properties of some other words or word-classes. The verb *slip*, for example, is licensed in the ditransitive construction, as in (1a), if it means 'to give someone something secretly,' and the meaning is appreciably different from the meaning that the verb has in a sentence like *He had slipped on an icy pavement.*[1]

(1) a. John slipped the porter a quarter.
    b. John gave the porter a quarter.

Fillmore & Atkins (1992:97) maintain that the syntactic pattern of *slip* in (1a) is "derivative," in the sense that the verb inherits its syntactic and semantic properties from *give*, which characteristically takes the double-object form, as shown in (1b). The grammatical properties of a verb, they claim, can overlap with the grammatical properties of some other verb if the meaning of the former has as a part the meaning of the latter, that is, if the former semantically adds some specific information to the latter. In fact, *slip* in (1a) is taken as specifying the manner in which John gave the porter a quarter. Similarly, the reason why the verb *smear* takes on the meaning 'to cover' in a sentence like (2a) is that it serves to specify the means that John used to cover the wall.

(2) a. John smeared the wall with mud.
    b. John covered the wall with mud.

Note that the verb *cover* cannot occur in the construction in which the verb *smear* characteristically occur (cf. the distinction of *I smeared mud on the wall* vs. **I covered mud on the wall*).

The theory of derivative syntax proposed by Fillmore & Atkins constitutes a part of the theory of pairings of form and meaning. If the syntactic form of a sentence is determined by the meaning of the verb involved in it, and if the argument structure or valence description is a syntactically relevant aspect of meaning, then the verb *slip* must have the argument structure that it inherits from *give* as well as the argument structure corresponding to the intransitive use. After all, it is a common practice to

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[1] *Collins COBUILD English Dictionary*, s.v. "slip."

assign multiple argument structures to a verb that occurs in distinct constructions. However, Goldberg (1995) argues that argument structures should not be attributed to verbs, but rather to the syntactic configurations in which they occur. In short, argument structures are independent of the verbs that they are associated with.

In the analysis proposed by Goldberg, basic sentence types like the ditransitive construction are identified as "argument structure constructions," that is, pairings of form and meaning at the level of simple sentences. Verbs are integrated into an argument structure construction if they are in a specific semantic relation to that construction. Furthermore, argument structure constructions are claimed to represent in a schematic way events that are basic to human experience. Such humanly relevant scenes function as conceptual archetypes, in the sense of Langacker (1991), and hence any language may very well encode such scenes in one way or another. In Goldberg's theory, then, it makes sense to conduct a comparative study of basic sentence types.

The purpose of this paper is to examine her proposed analysis of the English ditransitive construction from a cross-linguistic perspective. Presenting data from English, German, and Japanese, I will show that the construction has a counterpart in German and in Japanese. Although Goldberg seems to be essentially correct in her claim that the ditransitive construction is a skeletal syntactic form associated with a schematic meaning, I will argue, following Jackendoff (1997a, b), that syntax and semantics are basically independent of (though, of course, related to) each other. As we will see in sections 3–5, ditransitive constructions in these languages have some differences, but those differences can be reduced at least in part to the syntactic factors distinguishing the languages we concern ourselves here and accounted for without reference to the constructional meaning. But let us begin by reviewing some important aspects of Goldberg's proposal.

2. A Constructional Approach to Derivative Syntax

2.1. Meaning of the Ditransitive Construction

Constructions, lexical or syntactic, are linguistic units, as well as words and morphemes. This is the basic tenet of construction grammar, a linguistic theory which is developed by Charles Fillmore and his associates (cf. Fillmore (1988), Fillmore & Kay (1993), Fillmore, Kay & O'Connor (1988), Lakoff (1987), among others). Proponents of construction grammar (or cognitive linguistics, with which it is affiliated) assume that every syntactic form has some concept to designate (see also Langacker (1987)). Accordingly, even a skeletal construction is paired with a semantic content, however schematic it may be. In this vein, Goldberg (1995) proposes a form-meaning pairing like (3) for the ditransitive construction, distinguishing it from the prepositional-dative

construction in (4).[2]

(3) a. $[_{VP}$ V NP_i $NP_j]$

b. 'to cause [someone]$_i$ to receive [something]$_j$'

(4) a. $[_{VP}$ V NP_j *to* $NP_i]$

b. 'to cause [something]$_j$ to move [somewhere]$_i$'

The merit of Goldberg's proposal lies in the fact that it can give an account of the contrast in acceptability between the sentences in (5).

(5) a. John sent a letter to Chicago.

b. *John sent Chicago a letter.

As these examples indicate, the indirect object does not simply designate the spatial goal, as the *to* phrase in the prepositional-dative construction. Rather, it is constrained to refer to a person who is able to receive something from someone. Accordingly, even (5b) is acceptable if *Chicago* is taken as referring to some specific people in Chicago (cf. Green (1974:103ff.)). Similarly, while *Sandy* can be taken as designating the target at which Sam was aiming the ball in (6a), it must refer to the person to whom Sam intended to pass the ball in (6b).

(6) a. Sam threw the ball to Sandy.

b. Sam threw Sandy the ball.

In fact, *Sandy* may not be taken as a dead person in (6b), otherwise the sentence is anomalous (Pinker (1989:83)). After all, the ditransitive construction is semantically restricted compared with the prepositional-dative construction.

Given the form-meaning pairing in (3), the sentences in (7) are prototypes or "good examples" of the ditransitive construction. For such sentences are most likely to be chosen as representative of it.[3]

(7) a. John gave her a bunch of flowers.

b. She sent me a letter.

c. Bill paid Mr. Smith $500 for the computer.

Such prototypes serve as reference points for the judgment of the acceptability of other examples. Thus, the contrast between the sentences in (8) is, for Goldberg, due to the fact that the speaker somehow categorizes the (a) sentence as a specific instance of the

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[2] The subscripts stand for the correspondences between the syntactic and semantic arguments as usual. Note that Goldberg represents the pairing of form and meaning differently. In particular, her notation includes a specification for subject. For purposes of the present paper, however, such a specification seems redundant and I choose to omit it, because all of the examples discussed here have a human subject, which is invariably interpreted as the agent or more precisely the giver in the ditransitive construction.

[3] For the relevance of the notion "prototype" to linguistic theory, see Fillmore (1975), Jackendoff (1983), Lakoff (1987), Langacker (1987), among others.

prepositional-dative construction, while judging the (b) sentence too deviant compared with the prototypes in (7) to subsume under the category of ditransitive construction.

(8) a. We donated $10 to UNICEF.
b. *We donated UNICEF $10.

It is not clear, however, why (8b) is judged deviant. Put differently, why is it that the verb *donate* is licensed in the prepositional-dative construction but prevented from occurring in the ditransitive construction? This seems especially puzzling if we take into consideration the fact that the verbs *give*, *send*, and *pay* in (7) accept the prepositional-dative form as well (cf. *John gave a bunch of flowers to her*, *She sent a letter to me* and *Bill paid $500 to Mr. Smith for the computer*). The problem is that not every verb that accepts one form accepts the other. Boiled down, the question is what enables a verb to integrate into a construction?

2.2. Integration of a Verb into the Construction

Goldberg (1995) proposes that verbs integrate into a grammatical construction if their meaning stands in a relation R to the meaning associated with that construction, where R may be "be an instance of," "be the means of," "be the precondition of", or some other relation. For example, the sentences in (7), characterized as prototypes of the ditransitive construction, are thought to have a meaning that is an instance of the constructional meaning in (3b), that is, 'to cause someone to receive something.'

Similarly, sentences such as those in (9) can be taken as instantiating the constructional meaning, since each of them is used to describe a situation in which John caused Sean to receive a certain piece of information.

(9) a. John told Sean the truth.
b. John taught Sean English.
c. John read Sean a story before tucking him in.

It should be noted, however, that the verbs *tell*, *teach*, and *read* in these sentences are interpreted not only as an instance of the transfer of information but also as the means of it. That is, John gave Sean some information by telling, teaching, or reading it. Means, Goldberg claims, is another example of the R relation.

Yet another example of the R relation is precondition. Goldberg has recourse to the precondition relation in accounting for what has been referred to as the *for* dative in the literature (Fillmore (1965), Green (1974), among others). The ditransitive construction may contain a transitive verb, as in (10).

(10) a. John baked Yoko a cake.
b. John bought Yoko a book.
c. John sang Yoko a ballad.

Every transitive verb is not licensed in the ditransitive construction. The transitive verb that may occur in it is constrained to describe creation (e.g. *bake* in (10a)), obtaining (e.g. *buy* in (10b)), or artistic performance (e.g. *sing* in (10c)). As is well known, the indirect object that occurs with such a verb is similar in meaning to the *for* phrase of beneficiary: for example, (10a) can be paraphrased as *John baked a cake for Yoko.*[4] What is important here is that the sentence in question does not simply mean 'John gave Yoko a cake' but rather 'John baked a cake for the purpose of, or with the intention of, giving it to Yoko.' The verb *bake*, which has the meaning 'to cook something in an oven,' serves to designate the precondition for the transfer of a cake from John to Yoko. (He couldn't have given it to her unless he had baked it!) Similarly for the other examples in (10). It is this precondition relation that Goldberg argues enables a transitive verb to occur in the ditransitive construction.

Goldberg is assuming frame semantics. Note that frame semantics constitutes a fundamental part of construction grammar. A linguistic expression, whether it is a morpheme, word, phrase, or clause, evokes a certain frame or structured knowledge about its designatum, against the background of which it (as well as a larger expression containing it) can be interpreted appropriately (Fillmore (1982)). Of course, this is also true of verbs. Every verb has some frame associated with it. Thus, hearers must make reference to such frames to interpret the meanings of the sentences accurately. Verbs, Goldberg claims, do not change their meaning, whatever construction they integrate into. Thus, the verb *sing* invariably describes an act of singing in *John sang a ballad*, and *John sang Yoko a ballad*. What distinguishes these two uses of *sing* is the interpretation assigned to it: "singing" is seen as an instance of artistic performance in the former case but as the precondition for transfer in the latter. For Goldberg, the transfer sense of a ditransitive sentence is to be attributed to the syntactic configuration, not to the verb, which leads to the claim that it is not the verb but the construction that is polysemous.

2.3. Constructional Polysemy

We have observed that (9a–c) have in common a schematic meaning such as (11). Similarly, the schematic meaning in (12) can be abstracted from (9a–c). Since such

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[4] In what follows, I will refer to an indirect object of recipient as a "*to* dative" and an indirect object of beneficiary as a "*for* dative" if it is necessary to distinguish them. We have already mentioned the semantic difference between *to* datives and *to* phrases of goal. Similarly, as Allerton (1978) points out, *for* datives are different from their corresponding beneficiary *for* phrases. For example, the sentence *John wrote Yoko a letter* can mean 'John wrote a letter for Yoko's benefit' but not 'John wrote a letter on Yoko's behalf,' whereas the sentence *John wrote a letter for Yoko* can express both of these meanings.

syntactically relevant aspects of meaning are by hypothesis attributed to the syntactic structure of the sentences, Goldberg posits (11) and (12) as semantic structures for the ditransitive construction as well as (3b).

(11) 'to cause [someone]$_i$ to receive [something]$_j$ by V-ing it'

(12) 'to V [something]$_j$ in order to cause [someone]$_i$ to receive it'

That is to say, the construction has multiple meanings.[5] These constructional meanings do not stand on a par, however. According to Goldberg, (3b) is the central sense of the construction and (11) and (12) extensions of it. The meanings, thus connected, form a network, and hence the ditransitive construction is a radial category, in the sense of Lakoff (1987).

It is important to note that Goldberg (1995:39) advances the hypothesis that "constructions which correspond to basic sentence types encode as their central senses event types that are basic to human experience." The semantic structure in (3b), then, is the schematic representation of a humanly relevant scene and functions as a conceptual archetype, in the sense of Langacker (1991), which is claimed to underlie the prototypical value of the ditransitive construction in (3a). Psycholinguistic evidence, Goldberg maintains, favors her Scene Encoding Hypothesis. Words or morphemes that instantiate such conceptual archetypes are learned early and used most frequently. The verb *give* is a case in point here. Cross-linguistically, the hypothesis is also confirmed: a conceptual archetype is linked to a certain grammatical construction or morphological marker in various languages. To be sure, languages may encode a humanly relevant scene differently and arbitrarily. Thus, there must be some construction with the meaning in (3b), that is, 'to cause someone to receive something,' as its central sense in languages other than English. In fact, as we shall discuss shortly, German and Japanese have a specific construction that is formally different from but semantically corresponding to the English ditransitive construction.

Moreover, we cannot tell how exactly the central sense of a construction is extended any more than predict the syntactic form of that construction in a given language. "The specific set of extensions is not strictly *predictable*," Langacker (1991:295) says, "but each extension is *motivated* in some fashion." Goldberg (1995) also acknowledges the unpredictability of semantic extension: "the patterns of polysemy must in general be learned for each individual construction" (op. cit., p. 76); but she claims that some regularities are observable in the relations between a particular sense of a

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[5] Goldberg posits four more senses of the ditransitive construction. I believe, however, the three senses—(3b), (11), and (12)—are sufficient to achieve the main purpose of this paper, which is to compare the English ditransitive construction with its corresponding constructions in German and Japanese.

construction and extensions from this sense. It is possible that a certain pattern of semantic extension recurs frequently and is applied to new cases productively in a language or languages. In a similar vein, Jackendoff (1997b) proposes what he calls the "verb subordination archi-construction," based on the observation that verbs are taken as designating the means of an action if used in particular constructions. The semantic structure in (11), which is an extension from the central sense of the ditransitive construction in (3b), can ultimately be subsumed under this archi-construction. As we shall discuss in the next two sections, the semantic extension from (3b) to (12) applies to German and Japanese as well.

We have so far sketched out Goldberg's analysis of the English ditransitive construction. In her analysis, what Fillmore & Atkins call "derivative syntax" is treated as a special case of the integration of verbs into constructions. A construction corresponding to a basic sentence type has as the central sense a conceptual archetype, that is, the schematic representation of a humanly relevant scene. On the Scene Encoding Hypothesis, Goldberg suggests that every language must have a means of encoding such a scene. Her view thus allows us to conduct a comparative study from a specific point of view. So it is worth pursuing the issue. In the next section, I will compare English and German ditransitive constructions. I will make a further comparison of English, German, and Japanese in the subsequent section.

3. The German Ditransitive Construction

3.1. The Family of Ditransitive Constructions

A prototypical example of the English ditransitive construction like (13a) can be rendered in German as (13b).

(13) a. He gave her a bunch of flowers.

b. Er hat ihr einen Blumenstrauß gegeben.
he has her a bunch of flowers given

The difference between (13a) and (13b) is that the direct and indirect objects are assigned the same case in the former, but a different case in the latter. Both the direct object *a bunch of flowers* and the indirect object *her* are marked with the objective case in (13a), but *einen Blumenstrauß* and *ihr* are marked with the accusative case and dative case in (13b). It should be noted that the direct object and indirect object are morphologically distinguished in German. Thus, the English ditransitive construction corresponds to a German construction as is represented in (14).[6]

(14) a. $[_{VP}$ [NP/Dat]$_i$ [NP/Acc]$_j$ V]

[6] The notations "NP/Acc" and "NP/Dat" represent the accusative and the dative form of an NP.

b. 'to cause [someone]$_i$ to receive [something]$_j$' (= (3b))

The German ditransitive construction, like English, is exemplified by a sentence with a verb of sending (e.g. *senden* 'send' in (15a)) or a verb of communication (e.g. *erzählen* 'tell' as in (15b)) as well as by a sentence with a verb of giving such as (13b).

(15) a. Die Mutter hat ihrem Sohn ein Paket gesendet.
the mother has her son a parcel sent
'The mother sent her son a parcel.'

b. Die Tante erzählt ihrem Neffen eine Geschichte.
the aunt reads her nephews a story
'The aunt reads her nephews a story.'

The German ditransitive construction is also similar to its corresponding English construction in that it is extended and acquires the benefactive sense (cf. §2). For example, although the sentences *John gave Yoko a cake* and *John baked Yoko a cake* take the same syntactic form, they are different in meaning, as is clear from the fact that the former has a meaning comparable to *John gave a cake to Yoko* but the latter has a meaning comparable to *John baked a cake for Yoko*. Similarly, the example in (16) conveys a benefactive sense like 'She baked a cake for him.' Note that the sentence exhibits the same syntactic pattern as (13b), (15a), and (15b).'[7]

(16) Sie hat ihm ein Kuchen gebacken.
she has him a cake baked
'She baked him a cake.'

That is, the syntactic structure in (14a) is typically used to express the meaning in (14b), but it can also be used to express the meaning in (12), that is, 'to V something in order to cause someone to receive it.' Thus, the English ditransitive construction and the German ditransitive construction prove to be comparable, and I believe that they can be subsumed under the same category. To be sure, they have some differences.

3.2. The Distinction between the Accusative and Dative Cases

3.2.1. The fixed order of direct object and indirect object

German allows the direct object to invert with the indirect object. Thus, both of the sentences in (17) are fully acceptable.

(17) a. Sie hat dem Mann das Buch gegeben.
she has the man the book given
'She gave the man the book.'

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[7] The dative NP that occurs with a transitive verb, as in (16), is traditionally referred to as the "dativus commodi" or "dative of advantage" and, like the *for* dative in English, is comparable to *für NP/Acc* 'for NP', *zugunsten NP/Gen* 'for the benefit of NP' or *an Stell NP/Gen* 'on NP's behalf' (cf.

b. Sie hat das Buch dem Mann gegeben.
she has the book the man given
'*She gave the book the man.'

In English, by contrast, the indirect object must precede the direct object at least in the post-verbal position: the two objects cannot change their positions.[8]

(18) a. John gave the woman in the blue suit the keys.
b. *John gave the keys the woman in the blue suit.

In this respect, the German ditransitive construction is apparently similar to the English prepositional-dative construction, rather than to the English ditransitive construction, because the NP object can easily invert with the PP of goal, as shown by the sentences in (19), which are taken from Culicover (1982:336).

(19) a. John gave a book about amphibians to Mary.
b. John gave to Mary a book about amphibians.

Because the order of indirect object and direct object is fixed in English but not in German does not necessarily mean, however, that ditransitive constructions in these two languages are different in kind from each other. The fixed order obviously comes from the fact that the accusative and dative cases are not distinguished any longer in English. The accusative/dative distinction was lost at the time of Middle English. The English ditransitive construction is in a sense a remnant of Old English, where the direct and indirect objects were formally distinguished in the same way that they are in Modern German, and it can be seen as a "cognate," as it were, of the German ditransitive construction.

The ban on the inversion of direct object and indirect object in English is based on the fact that each of the two objects can only be identified as such with reference to their relative order. If the direct object inverts with the indirect object, neither will receive an appropriate interpretation. German, on the other hand, has two possible permutations of direct object and indirect object, that is, *NP/Acc–NP/Dat* and *NP/Dat–NP/Acc*, since the morphological difference between the accusative case and dative case tells which is the direct object and which is the indirect object. The English prepositional-dative construction allows the NP object to invert with the goal phrase for the same reason. It should be noted, however, that the inversion of two NPs is impermissible unless their morphological forms clearly show their grammatical functions even in a language like German.

In German, feminine and neuter nouns have an identical form for the nominative

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Helbig & Buscha (1972), Zimmermann (1985)).

[8] Exmaples (18a, b) are taken from Wexler & Culicover (1980:277), who make an attempt to give

case and accusative case when they are in the singular. The nominative NP *der Mann* 'the man' can invert with the accusative NP *die Frau* 'the woman,' as shown in (20), because its form, being different from the accusative form *den Mann*, shows its grammatical function (i.e. subject) unambiguously.

(20) a. Der Mann hat die Frau gesehen.
the man has the woman seen
'The man saw the woman.'

b. Die Frau hat der Mann gesehen.
the woman has the man seen
'The woman, the man saw.'

The NP *die Frau*, on the other hand, can function both as subject and as direct object, and so can the NP *das Mädchen* 'the girl.' Note that *Frau* is feminine and *Mädchen* neuter. Consequently, these NPs cannot change their positions.[9]

(21) a. Das Mädchen hat die Frau gesehen.
The girl has the woman seen
'The girl saw the woman.'

b. *Die Frau hat das Mädchen gesehen.
the woman has the girl seen
'The woman, the girl saw.'

The English ditransitive construction is syntactically constrained compared with its corresponding German construction, but it now becomes clear that the constraint comes from a general difference between the two languages, that is, that German draws formal distinctions between the accusative and dative case, while English does not. In the subsequent two sections (§§3.2.2–3.2.3), we discuss some effects of the presence/absence of the accusative/dative distinction to the pragmatic properties of English and German ditransitive constructions.

3.2.2. Pragmatic (un)markedness

As is often mentioned in the literature, the English ditransitive construction has a marked information structure. For example, Givón (1979) argues that indirect object must be more "topical" than direct object. Similarly, Erteschik-Shir (1979) proposes that direct object should be more "dominant" than indirect object. What their claims have in common is that in interpreting a ditransitive sentence, the hearer is expected to focus his or her attention on the direct object rather than the indirect object. As a result,

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a syntactic account of the contrast between the sentences.

[9] Sentence (21b) is, of course, acceptable if *die Frau* and *das Mädchen* function as subject and direct object, respectively.

the direct object is invariably brought into the focus of utterance, and it is impossible that the indirect object is in focus instead.

This functional-pragmatic view allows us to give a different account of the unacceptability of (18b). Since a focus NP is by default placed in the clause-final position, heavy NP shift serves to change the focus from the direct to the indirect object, which violates the discourse-functional condition for the construction.[10] A similar account can be given of the contrast between the sentences in (22).

(22) a. What did you give the girl?
b. *Whom did you give flowers?

In (22b), the indirect object is brought into the focus of question with the direct object left in the presupposition (that is, 'you gave someone flowers'), which causes a violation of the condition that indirect object may not be in focus instead of direct object. By contrast, the German ditransitive construction is free from such a condition: both direct object and indirect object can be questioned in German.

(23) a. Was hast du dem Mädchen gegeben?
what have you the girl given
'What did you give the girl?'
b. Wem hast du die Blumen gegeben?
whom have you the flowers given
'Whom did you give the flowers?'

Similarly, either of the two post-verbal constituents can be in focus in the prepositional-dative construction.

(24) a. What did you give to the girl?
b. To whom did you give flowers?

In English, the direct object is pragmatically conditioned to be in the focus of utterance. But this demonstrably comes from the general principle that two NPs do not invert if their grammatical relations are formally unidentifiable. Recall that direct and indirect objects are formally identical in English, and that direct object, being in the clause-final position, is invariably associated with focus in the language. The marked information structure of the English ditransitive construction is, in a sense, syntactically motivated. For the disappearance of the accusative/dative distinction is arguably a purely formal fact. The German ditransitive, on the other hand, is immune from such a constraint as is imposed on its counterpart in English, since the language has the

[10] The prepositional-dative construction normally focuses on the clause-final goal phrase, but it may shift its focus to the direct object if it inverts with the goal phrase or if it bears an emphatic stress in situ. Similarly, in German, the two objects may freely change their positions, insofar as the following object, not the preceding one, is in focus (cf. Lenerz (1977)).

accusative and dative cases as independent morphological categories. We now turn to the category "dative" and a consequence of its existence.

3.2.3. The "malefactive" sense of the construction

In English, verbs of obtaining such as *buy* and *steal* are possible in the ditransitive construction (cf. §2).

(25) a. He bought her a ring.
b. He stole her a ring.

In these sentences, the indirect object is construed as beneficiary, and similar in meaning to the PP *for her*. Accordingly, the verbs of obtaining are taken here as designating the precondition for the subject referent's action of giving a ring to a particular woman. That is, such a verb is licensed in the syntactic form (26a), which encodes a meaning such as (26b).

(26) a. $[_{VP}$ V NP_i $NP_j]$
b. 'to obtain [something]$_j$ in order to cause [someone]$_i$ to receive it'

The same is true of verbs of obtaining in German. The verbs *kaufen* 'buy' and *stehlen* 'steal,' for example, can occur in the ditransitive construction and receive a parallel interpretation as *buy* and *steal*. Thus, (27a) has a meaning corresponding to (25a) and (27b) a meaning corresponding to (25b).

(27) a. Er hat ihr einen Ring gekauft.
he has her a ring bought
b. Er hat ihr einen Ring gestohlen.
he has her a ring stolen

It should be noted that (27b) also has the meaning 'He stole a ring from her.' In fact, as Andreas Wickers pointed out to me, this reading is preferable. The indirect object is then understood as referring to the person whose ring was stolen. The thematic role assigned to it under the reading in question is not beneficiary let alone recipient. Rather, it is victim or at least source. A dative NP of this type is traditionally referred to as the "dativus incommodi" (or "dative of disadvantage"), as opposed to the "dativus commodi" (or "dative of advantage").

We must then posit a meaning like (28b) for the German ditransitive construction. Let us refer to the form-meaning pairing in (28) as the "malefactive construction."[11]

(28) a. $[_{VP}$ NP/Dat$_i$ NP/Acc$_j$ V]
b. 'to obtain [something]$_j$ from [someone]$_i$'

[11] I use this term, although I admit that the dative NP is not always construed as victim in the malefactive construction. In a sentence such as the one to be given in (32a), the dative NP is obviously construed as beneficiary. Important is the fact that the beneficiary, as well as the victim, is identified as

The verb *stehlen*, when used in the form (28a), can be taken both as an instance or means of obtaining and as a precondition for transfer. In the former reading, (27b) is a malefactive construction, while it is a benefactive construction in the latter reading. Other verbs may also appear in this construction. As (29) shows, there are many verbs which have the so-called separable prefix *ab-* or inseparable prefix *ent-*.

(29) a. Er nahm ihr beim Kartenspiel viel Geld ab.
he took her at-the card game much money off
'He took a lot of money from her when they played cards.'

b. Er entriß ihr die Tasche.
he snatched her the bag
'He snatched the bag from her.'

However, such a prefix is not necessary, as is clear from the sentence in (30), in which the verb *nehmen* 'take' does not have the prefix *ab-*.[12]

(30) Dieses Recht kann ihm niemand nehmen.
this right can him no one take
'This right, no one can take away from him.'

In fact, neither *ab-* nor *ent-* is sufficient to integrate a verb into the construction. The verb *abgeben*, for example, appears not in the malefactive construction, but in the prototypical ditransitive construction, although it has the prefix *ab-*.

(31) Er hat seinem Sohn das Gut abgegeben.
he has his son the property off-given
'He gave his son his property.'

We have so far seen that in German, verbs of obtaining can appear both in the benefactive construction and malefactive constructions. Several questions come to mind. How does the German speaker distinguish these two constructions? As already mentioned, their semantic difference is not marked by any morpheme. The prefix *ab-*, for example, does not inform the hearer of anything about the distinction (cf. (29a) vs. (31)). The hearer might well hang on to verb meaning in distinguishing one construction from the other. But then why is it that the verb *kaufen* allows only the benefactive interpretation? Why is it that the verb *stehlen* prefers the malefactive interpretation to the benefactive interpretation? It seems puzzling if we take into account the fact that both of the verbs *buy* and *steal* receive a benefactive interpretation in English. One might say that *kaufen* is prevented from occurring in the malefactive construction because there is another verb that is specific for this construction—that is, *abkaufen* (cf.

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the source of the object referred to by the accusative NP in a malefactive construction.

[12] *Duden „Bedeutungswörterbuch"*, 2nd ed., s.v. 'nehmen.'

(32a)). But this does not give any account of the reason that *stehlen* is blocked in the benefactive construction. For this verb still receives a malefactive interpretation when it is combined with *ab-* in a sentence such as (32b).

(32) a. Er hat ihr einen Ring abgekauft.
he has her a ring off-bought
'He bought a ring from her.'

b. Er hat ihr einen Ring abgestohlen.
he has her a ring off-stolen
'He managed to steal a ring from her.'

As already mentioned, German draws formal distinctions between the accusative case and dative case. As a result, the dative case exists as an independent category in the language. The difference between English and German ditransitive constructions could be attributed to this fact. Suppose that the dative case has the function of marking an NP that designates a position (or a person at that position). A sentence will instantiate the central sense of the ditransitive construction or a certain extension from it if the accusative object refers to a thing that is located in the dominion of the dative object's referent at the initial phase of the situation described by a ditransitive sentence, but that sentence will instantiate the malefactive sense if the accusative object is construed as located in the dominion of the dative object's referent at the final phase. English somehow lacks the latter option. It remains to be seen why English is thus different from German.

In the next section, we will observe that Japanese, another language where the accusative case is formally distinguished from the dative case, is similar to German in that the direct and indirect objects can freely change their positions and in that the indirect object may be construed as the source, but that they also have some differences as well.

4. The Japanese Ditransitive Construction

4.1. The Incompatibility of the Ditransitive Construction with the Benefactive Sense

The Japanese ditransitive construction is defined as a pairing of form and meaning like (33).

(33) a. $[_{VP}\ NP_i\text{-}ni\ NP_j\text{-}o\ V]$

b. 'to cause [someone]$_i$ to receive [something]$_j$' (= (3b))

The meaning in (33b), which is identical to the central sense of the English and German ditransitive constructions, is associated with a syntactic form such as (33a). The construction is prototypically instantiated by a sentence with a verb of giving (e.g. *age-* 'give' in (34a)), a verb of sending (e.g. *okur-* 'send' in (34b)), or a verb of

communication (e.g. *osie-* 'teach' in (34c)).[13]

(34) a. Hanako-wa Taroo-ni okasi-o age-ta.
H.-Top T.-Dat cake-Acc give-Past
'Taro gave Hanako a cake.'

b. Okaasan-wa musuko-ni kozutumi-o okut-ta.
mother-Top son-Dat parcel-Acc send-Past
'The mother sent her son a parcel.'

c. Hanako-wa Ziroo-ni eigo-o osie-ta.
H.-Top J.-Dat English-Acc teach-Past
'Hanako taught Jiro English.'

In Japanese, as in German, the direct object is marked with the accusative case and the indirect object is marked by the dative case. As predicted, the direct and indirect objects can undergo inversion.[14]

(35) a. Hanako-wa otoosan-ni tokei-o age-ta.
H.-Top father-Dat watch-Acc give-Past
'She gave her father the watch.'

b. Hanako-wa tokei-o otoosan-ni age-ta.
H.-Top watch-Acc father-Dat give-Past
'*She gave the watch her father.'

However, Japanese is different from German (and for that matter from English) in that the syntactic form in (33a), as it stands, cannot be used to express the benefactive sense. Thus, the sentence in (36) sounds odd, though not completely unacceptable.

(36) ?*Hanako-wa Taroo-ni okasi-o yai-ta.
H.-Top T.-Dat cake-Acc bake-Past
'Hanako baked Taro a cake.'

To express the intended meaning of (36), we must either replace the dative particle *-ni* with the complex particle *-no tame-ni* 'for the benefit of,' as in (37a), or turn the verb *yak-* to the *te* form and combine it with an auxiliary verb *yar-*, *age-*, *kure-*, or *kudasar-*, all of which originated in the verbs of giving, as in (37b).

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[13] In the Japanese examples adduced in this paper, the topic marker *-wa* will be used instead of the nominative case particle *-ga*, simply because the *wa*-marked subject is preferable to, and sounds more natural than, the *ga*-marked subject in a simple sentence in the absence of some other topic. Note that I will sometimes speak of a certain NP as being in the nominative even though it is marked with *-wa*, not with *-ga*, in the examples shown.

[14] Like German, Japanese allows two NPs to invert only when their forms clearly show their grammatical functions. There are some kinds of predicates that take two nominative NPs as the subject and direct object in Japanese. In such sentences, the two NPs cannot undergo inversion. For example, the sentence *John-ga Mary-ga suki-da* normally has the meaning 'John likes Mary' and is hardly assigned the interpretation 'John, Mary likes.'

(37) a. Hanako-wa Taroo-no tame-ni okasi-o yai-ta.
H.-Top T.-Gen benefit-Dat cake-Acc bake-Past
b. Hanako-wa Taroo-ni okasi-o yai-te age-ta.
H.-Top T.-Dat cake-Acc bake-Ger give-Past

This observation suggests that the ditransitive construction cannot have the benefactive sense in (38c) by itself and that the benefactive sense should be paired not with the syntactic structure in (33a), but with (38a) or (38b) or both.

(38) a. [$_{VP}$ NP_i-ni NP_j-o V-te {yar-/age-/kure-/kudasar-}]
b. [$_{VP}$ NP_i-no tame-ni NP_j-o V]
c. 'to V [something]$_j$ in order to cause [someone]$_i$ to receive it'

As we will observe shortly, there is evidence to show that the benefactive construction in (38a) is semantically related to the ditransitive construction in (33), despite their formal difference. I will argue that these two constructions belong to the same category and that the other benefactive construction in (38b) should be treated differently.

4.2. The Relation between the Benefactive and the Ditransitive Construction

The indirect object is basically construed as recipient, not as beneficiary, in a sentence of the form (33a). Thus, the sentence in (39a) makes a remarkable contrast with the one in (39b).

(39) a. John-wa Yooko-ni tegami-o kai-ta.
J.-Top Y.-Dat letter-Acc write-Past
'John wrote Yoko a letter.'
b. *?John-wa Yooko-ni hon-o kai-ta.
J.-Top Y.-Dat book-Acc write-Past
'John wrote Yoko a book.'

Sentence (39a) describes the situation in which John wrote a letter addressed to Yoko, and thus the indirect object is construed as the recipient, and can be rendered as (40a) in English and as (40b) in German.

(40) a. John wrote Yoko a letter.
b. John hat Yoko einen Brief geschrieben.
J. has Y. a letter written

In passing, the indirect object of *write* or *schreiben* is ambiguous between the recipient and the beneficiary reading if the verb collocates with a noun *letter* or *Brief* in direct object position. Thus, (40a) has two meanings corresponding to *John wrote a letter to Yoko* and *John wrote a letter for Yoko*. Similarly, (40b) can also be paraphrased as *John hat einen Brief an Yoko geschrieben* 'John wrote a letter to Yoko' and as *John hat*

einen Brief für Yoko geschrieben 'John wrote a letter for Yoko' (cf. Helbig & Buscha (1972:290)). By contrast, (39a) is unambiguous, since the dative NP does not bear the beneficiary role in the absence of an auxiliary verb in Japanese.

Example (39b) is extremely unnatural, though not totally unacceptable. The reason for the oddness of this sentence is that the interpretation of the dative NP is coerced into a beneficiary reading by the collocation of the verb *kak-* 'write' with the NP *hon* 'book' in direct object position, as it is clear from the fact that in both (41a) and (41b), the indirect objects do not bear any role but beneficiary, like the beneficiary phrases in *John wrote a book for Yoko* and *John hat ein Buch für Yoko geschrieben.*

(41) a. John wrote Yoko a book.
b. John hat Yoko ein Buch geschrieben.
J. has Y. a book written

The indirect object *Yooko* in (39b) cannot have such an interpretation. To assign the interpretation in question to the indirect object, we must either combine the verb *kak-* (plus the suffix *-te*) with an auxiliary verb, as in (42a), or replace the dative particle *-ni* with the beneficiary *-no tame-ni* 'for the benefit of,' as in (42b).

(42) a. John-wa Yooko-ni hon-o kai-te age-ta.
J.-Top Y.-Dat book-Acc write-Ger give-Past
b. John-wa Yooko-no tame-ni hon-o kai-ta.
J.-Top Y.-Gen benefit-Dat book-Acc write-Past

The *ni* phrase in (42a) is different from the *no tame-ni* phrase in (42b), though. (42b) implies that Yoko received some benefit from John's having written a book, implicating that John dedicated his book to Yoko. As a result, it may be applied to the situation in which she has already read it or the situation in which she has not read it yet. In (42a), on the other hand, Yoko is not only the beneficiary but also the recipient, and the sentence as a whole invites the inference that she knows the contents since John intended to read her his book or at least let her read it. This is borne out by the contrast between the sentences in (43).

(43) a. John-wa yomikaki-ga deki-nai oziisan-ni tegami-o kai-ta.
J.-Top illiterate grandfather-Dat letter-Acc write-Past
b. John-wa yomikaki-ga deki-nai oziisan-ni tegami-o kai-te
J.-Top illiterate grandfather-Dat letter-Acc write-Ger
age-ta.
give-Past

The presence/absence of the auxiliary verb *age-* gives rise to a semantic difference between these two sentences. (43a), having the meaning 'John wrote a letter and sent it to his grandfather, who happens to be illiterate,' is nonsensical in a normal context.

(43b), on the other hand, is ambiguous: on one reading, it means the same as (43a), and on the other reading, it receives an interpretation such that John wrote a letter on his grandfather's behalf, since he was illiterate.[15]

Moreover, there is grammatical evidence for the difference between the *ni* phrase in (42a) and the *no tame-ni* phrase in (42b). The *ni* phrase can become the head of a relative clause, while the *no tame-ni* phrase cannot.[16]

(44) a. John-ga hon-o kai-te age-ta hito
J.-Nom book-Acc write-Ger give-Past person
'the person for whom John wrote a book'

b. *John-ga hon-o kai-ta hito
J.-Nom book-Acc write-Past person
'the person for whom John wrote a book'

In this respect, the *ni* phrase in (42a) is similar to the *ni* phrase in the sentence *John-wa Yooko-ni tegami-o kai-ta* 'John wrote Yoko a letter' (cf. (39a)). The *ni* phrase can also undergo relative clause formation.

(45) John-ga tegami-o kai-ta hito
J.-Nom letter-Acc write-Past person
'the person to whom John wrote a letter'

The above observations lead us to the conclusion that the benefactive construction in (38a) should be grouped together with the ditransitive construction in (33), not with the construction with the beneficiary *-no tame-ni* in (38b). In fact, the relationship between the ditransitive construction and the benefactive construction is also borne out by the fact that the auxiliary verbs *yar-*, *age-*, *kure-*, and *kudasar-* are derived from the verbs of giving, which prototypically instantiate the central sense of the ditransitive construction, via grammaticization.[17]

4.3. The Role of Auxiliary Verbs in Semantic Extension

The above discussions clearly show that Japanese has recourse to an auxiliary verb when it extends the ditransitive construction from the central sense to the benefactive

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[15] Japanese is different from English in that the indirect object can receive the "on someone's behalf" reading, and for that matter so is German (cf. notes 4 and 7). See also Jackendoff (1990:199–200) for a remark to the contrary.

[16] Example (44b) seems to be acceptable in the reading "the person about whom John wrote a book". This reading is irrelevant to the discussion here.

[17] Note in passing that the syntactic structure (38a) can also be used to express the central sense of the ditransitive construction, that is, the meaning represented in (33b). The sentence *Paul-ga John-ni gitaa-o osie-te age-ta* 'Paul taught John how to play the guitar' is a case in point. In this sentence, the *te* form contains the verb *osie-* 'teach,' which are subcategorized for a dative and an accusative NP as the verb *age-* 'give' is. The auxiliary verb may look redundant in such cases, but it serves to change the verb in the *te* form from a non-empathy verb to an empathy one (cf. Kuno (1987)).

sense. This is not limited to the ditransitive construction, however. Similar phenomena are observed elsewhere. As is well known, the auxiliary verb *ik-* is necessary when the goal is encoded by a *ni* phrase in a sentence with the verb *hasir-* 'run,' as shown by the contrast between (46a) and (46b).[18]

(46) a. ?*Taroo-wa eki-ni hasit-ta.
T.-Top station-Dat run-Past
'Taro ran to the station.'

b. Taroo-wa eki-ni hasit-te it-ta.
T.-Top station-Dat run-Ger go-Past
'(lit.) Taro ran and went to the station.'

The auxiliary verb *ik-* is derived from the verb of motion with the meaning 'go' via grammaticization. As a motion verb, *ik-* can occur with a dative NP of goal, as in (47).

(47) Taroo-wa eki-ni it-ta.
T.-Top station-Dat go-Past
'Taro went to the station.'

Japanese is in clear contrast to English and German. Verbs of motion do not need any auxiliary device to take a goal phrase in the latter two languages.

(48) a. He went to the station.
b. He ran to the station.

(49) a. Er ist zum Bahnhof gegangen.
he is to-the station gone
b. Er ist zum Bahnhof gelaufen.
he is to-the station run

Talmy (1985) argues, on the basis of the observation that *run* is taken as designating a manner of motion in a sentence like (48b), that the concepts of motion and manner can be conflated and lexicalized into a single verb in English. Certainly, the same thing is true of German: *laufen* is also construed as the manner of motion in (49b). Following Talmy, Yoneyama (1986) proposes that in Japanese, unlike English and German, the two concepts should be lexicalized independently. After all, an intransitive verb such as *run* in English or *laufen* in German can occur with a goal phrase if it is understood as specifying a manner of the motion described by the sentence in which it occurs. But in Japanese the intransitive verb *hasir-* can occur with a goal *ni* phrase only if it is combined with the auxiliary verb *ik-*. Then, the set of the sentences in (46a), (46b), and (47) can be seen as a paradigm of the semantic extension

[18] The grammtical status of (46a) is also improved by replacing *-ni* with *-made*, as in *Taroo-wa eki-made hasit-ta* 'Taro ran as far as the station.' See Yoneyama (1986) for a difference between the

of a basic sentence type in Japanese, as the set of the sentences in (34a), (36), and (37b). It remains to be seen, however, why auxiliary verbs are necessary in extending the central senses of basic sentence types in Japanese. This grammatical phenomenon could possibly be attributed to some idiosyncratic property of the language or a class of languages to which it belongs.[19] Unfortunately, a full exploration of this issue takes us too far afield of the present paper, and I do not attempt it here.

4.4. Verbs of Obtaining

As we observed in section 3.4, the indirect object can be interpreted not only as the recipient but as the source in German. The same is true of Japanese. Thus, *Hanako* is interpreted as the recipient of a book in (50a), but as the source in (50b).

(50) a. Taroo-wa Hanako-ni hon-o age-ta.
T.-Top H.-Dat book-Acc give-Past
'Taro gave Hanako a book.'

b. Taroo-wa Hanako-ni hon-o morat-ta.
T.-Top H.-Dat book-Acc receive-Past
'Taro received a book from Hanako.'

Clearly, the ditransitive construction in Japanese, like German, should be paired with the meaning 'to obtain something from someone' in (50b). But there is a difficulty in identifying the construction exemplified by sentences like (50b) as the Japanese counterpart of the German malefactive construction.

The construction in question can express what its allegedly corresponding construction in German cannot. For example, the meaning of the sentence in (51a) cannot be expressed by the German malefactive construction (i.e. **Er hat dem Lehrer English gelernt* '(lit.) He learned the teacher English').[20] Nor can the sentence in (51b) be rendered in German.[21]

(51) a. Taroo-wa sensei-ni eigo-o osowat-ta.
T.-Top teacher-Dat English-Acc learn-Past
'Taro learned English from the teacher.'

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phrases *eki-ni* and *eki-made*.

[19] Shibatani (1996) also suggests this possibility independently.

[20] Colloquially, however, the sentence *Er hat dem Lehrer Englisch gelernt* is acceptable in the interpretation 'He taught his teacher English.'

[21] German does not have a single verb with the meaning 'borrow' from the beginning. The verb *borgen*, a cognate of the English *borrow*, and *leihen* have the meaning 'to lend', but they can be extended to the meaning 'to borrow' when a reflexive pronoun appear in indirect object position and bound to the subject, as in *Ich habe mir von ihm zehn Mark geborgt/geliehen* 'I borrowed ten deutsche marks from him'.

b. Taroo-wa tomodati-ni okane-o kari-ta.
T.-Top friend-Dat money-Acc borrow-Past
'Taro borrowed some money from his friend.'

Moreover, there are some situations that can be described by the German malefactive construction but not by its "corresponding" Japanese construction. For example, the verb *nusum-* 'steal' is not allowed to occur with a dative NP of source.

(52) *Taroo-wa koibito-ni yubiwa-o nusun-da.
T.-Top girlfriend-Dat ring-Acc steal-Past

Example (52) does not mean that Taro stole a ring from his girlfriend, as the German *stehlen*, nor does it mean that Taro stole his girlfriend a ring, as the English *steal*.

The relation between the German malefactive construction and its "corresponding" Japanese construction needs a more careful study. Why is it that German and Japanese use the ditransitive construction to express the meaning 'to obtain something from someone'? We have observed that some verbs of obtaining occur in the construction in question, while some do not. Why is it that the verb *nusum-* does not behave like the verb *stehlen* or *steal*? Unfortunately, I cannot be specific about those questions. Suffice it to say, for the moment, that it is essential to conduct a study of verb semantics in tandem with a study of constructional meanings.

5. Concluding Remarks

What this paper has so far demonstrated, I believer, lends support to Jackendoff's reply to construction grammar. Jackendoff (1997a:176) argues that "there is a certain amount of independence between the existence of a syntactic construction and what meaning(s) it can express." Languages, he claims, may recruit different syntactic constructions for the expression of a particular meaning. In English, as Jackendoff points out correctly, the ditransitive construction is used to express the meaning of the raising-to-object construction as well, and hence a sentence *Make me a milkshake* is ambiguous between the benefactive and the causative reading. In the latter reading, *Poof! You're a milkshake* is a possible reply to the request. But this is not possible in German, as is clear from the fact that the ditransitive sense of the sentence *Make me a coffee* is rendered in German as *Mach mir einen Kaffee* and the causative sense is rendered as *Verwandle mich in einen Kaffee*. It should be noted here that the former has the syntactic form *NP/Dat NP/Acc V* and the latter has the syntactic form *NP/Acc PP V*. There is an obvious sense in which the pairing of form and meaning is arbitrary to some extent. It is therefore natural that German and Japanese use their ditransitive forms to express the meaning 'to obtain something from someone,' that is, what we call the "malefactive" sense.

Syntactic forms, as well as lexical items, are used arbitrarily. Accordingly, the semantic relation between a construction and the verbs that can be integrated into it gives rise to intricate problems. Transitive verbs such as *throw* and *kick* in English are mainly used to describe the action imparting a ballistic motion instantaneously to an object. As we observed in section 2, such verbs are possible in the ditransitive construction. Thus, both of the English sentences are fully acceptable as ditransitive constructions.[22]

(53) a. Mary kicked Gerald the ball.
b. Mary threw Gerald the ball.

But in German, neither the verb *werfen* 'throw' nor the verb *kicken* 'kick' is licensed in the ditransitive construction.

(54) a. *Mary hat Gerald den Ball gekickt.
M. has G. the ball kicked
b. *Mary hat Gerald den Ball geworfen.
M. has G. the ball thrown

The situation is more complicated in Japanese: the verb *ker-* 'kick' does not accept the ditransitive form, but the verb *nage-* 'throw' is possible (albeit marginally) in the construction in question.

(55) a. *Mary-ga Gerald-ni booru-o ket-ta.
M.-Top G.-Dat ball-Acc kick-Past
b. ?Mary-ga Gerald-ni booru-o nage-ta.
M.-Top G.-Dat ball-Acc throw-Past

Thus, each of the three languages demonstrably uses the ditransitive construction in a different way.

It should be noted, however, that if the verb *werfen* had the separable prefix *zu-* 'to,' which designates the notion of direction, then (54a) would be acceptable, as shown in (56a). But, as (56b) shows, the verb *kicken* is still impossible in the ditransitive construction even though *zu-* is attached to it. One should have combined the verb *spielen* 'play' and the prefix *zu* so as to express the meaning 'to kick someone the ball,' as in *Mary hat Gerald den Ball zugespielt.*

(56) a. Mary hat Gerald den Ball zugeworfen.
M. has G. the ball to-thrown

[22] Note in passing that the indirect object of the verb *kick* must denote something that can be caused to move smoothly along by kicking it. Thus, a noun like *ball* or *puck* typically appears in the accusative object. Hence the unacceptability of the sentence **Mary kicked Gerald the wall* comes from the fact that the accusative object refers to something inert.

b. *Mary hat Gerald den Ball zugekickt.
M. has G. the ball to-kicked

Similarly, the grammatical status of each sentence in (55) will be improved if the verb is combined with some other verb which clearly conveys the meaning 'to pass someone something.' Thus, the sentences in (57) are judged acceptable in the interpretation 'Mary threw or kicked Gerald the ball.' Note that the verb *watas-* has the meaning 'to pass.'

(57) a. Mary-wa Gerald-ni booru-o nage-te watasi-ta.
M.-Top G.-Dat ball-Acc throw-Ger pass-Past
b. Mary-wa Gerald-ni booru-o ket-te watasi-ta.
M.-Top G.-Dat ball-Acc kick-Ger pass-Past

To set out a theory of the integration of verbs into constructions, we must take into account constructional meanings, verb semantics, and the relation between them. Obviously, languages use distinct syntactic forms differently even if those forms have the same content as the central sense. However, as I demonstrated in this paper, such differences can ultimately be reduced (at least in part) to some general principles that serve to distinguish languages or classes of languages. So the task we need to achieve, I believe, is to show what certain differences among languages are traced back to and to explain those differences in so general a way as possible.

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