

## On the syntax of ditransitive constructions

The constructions under discussion are those which are generally accepted to have two arguments in addition to the subject: a ‘recipient/beneficiary/addressee’ argument, and a ‘theme’ argument. Typical ditransitive verb meanings are ‘give’, ‘sell’, ‘bring’, ‘tell’ (Haspelmath 2005, *The World Atlas of Language Structures*), though in many languages a wide range of verbs can occur in a ditransitive valency frame with a ‘recipient’ argument. The aim of this paper is to revisit the argument structure model underlying ditransitive constructions. In particular, I offer a new analysis of the dative alternation and constructions with applied recipients/beneficiaries.

By focusing on the syntax of the alternating and applicative constructions, I aim to complement the recent discussion of the dative alternation undertaken by Bresnan and colleagues (Bresnan 2003; Bresnan & Nikitina 2003/2007; Bresnan, Cueni, Nikitina & Baayen 2007). Their work has stemmed from two observations: first, that Lexical Mapping Theory appears incapable of accounting for the dative alternation adequately (Bresnan 2003:19, commenting on Bresnan & Moshi 1990 and Evans 1997); and second, that the ‘classical’ form of generative syntactic theory in general does not offer appropriate apparatus to explain the gradience in the natural uses of the dative alternation (Bresnan 2003:71; Bresnan & Nikitina 2003/2007). In response to the second observation, they apply a probabilistic approach to the dative alternation phenomenon, and successfully model the constraints behind the choice of the alternating variant. In the proposed paper, I offer a solution to the first problem by providing a theoretically satisfactory model of the dative alternation within LMT. In this way, the probabilistic approach gains an adequate lexical-syntactic representation of the modelled variants. With the revised theoretical tools, I also locate the dative alternation within the range of ditransitive constructions.

Bresnan (2003:20) points out that the problem with the standard LFG account of the dative alternation (cf. Bresnan 1978, 1982) is the assumption that the rules deriving the alternation are restricted to the information available in the lexical entries of verbs. I argue that this assumption is indeed uncalled-for. It is generally accepted that the dative alternation is ‘morphosyntactic’ – that is, ‘dative shift’ brings about a change in the morphosyntactic manifestation of the (same set of) semantic dependents of a predicate (e.g. Sadler & Spencer 1998:209-210). In order to capture this insight, I follow Ackerman & Moore (2001:48ff) in assuming that argument positions (i.e. the valency slots of the predicate) constitute an independent level of representation which is used to mediate the relation between semantic participants and grammatical function assignment (see also Falk 2001:101-105, and others), and that semantic participants should be understood as sets of semantic entailments of the predicate (and not as discrete thematic roles which are part of the lexical entry of verbs). Following Zaenen (1993:151) and Ackerman & Moore (2001:44ff), I argue that priority should be given to the *syntactic* representation of the predicate’s valency rather than the *semantic* representation of thematic roles with which argument positions are linked, and I assume that the following valency template is available to a base (non-derived) predicate:

$$\langle \text{arg}_1 \quad \text{arg}_2 \quad \text{arg}_3 \quad \text{arg}_4 \quad \dots \quad \text{arg}_n \rangle$$

$$[-\text{o}/-\text{r}] \quad [-\text{r}] \quad [+ \text{o}] \quad [-\text{o}] \quad \dots \quad [-\text{o}]$$

(note that the pre-specification of the ordered valency slots corresponds to LFG’s hierarchy of syntactic functions, but it is based on LMT’s atomic values instead of final grammatical functions). Since argument positions are linked with particular types of predicate entailments, if the predicate does not have a particular set of entailments, the slot corresponding to that set of entailments is not invoked. Thus, for a particular predicate, the angled brackets contain all and only the selected valency slots for the arguments associated with that predicate, both core and non-core ( $\text{arg}_n [-\text{o}]$  indicates the availability of multiple non-core arguments).

Within such conception of LMT, a ditransitive predicate projects three sets of semantic entailments which align with the available argument positions following a well-formedness condition on linking (Ackerman & Moore 2001:44-45). Now, keeping constant the valency template, three different patterns of alignment between semantic participants and argument slots have been found in predicates which involve a ‘beneficiary’ participant ( $x$  = participant with the most proto-agentive properties;  $y$  = participant with the most proto-patientive properties;  $b$  = participant with the most proto-beneficiary properties; see Dowty 1991, Ackerman & Moore 2001, Primus 1999):

### (A) Constructions with non-applied beneficiaries:

(1)	$x$	$y$	$b$	beneficiary as a non-derived dative / ‘plain dative’
	⟨ $\text{arg}_1$	⟨ $\text{arg}_2$	⟨ $\text{arg}_3$ ⟩	
	[- o]	[- r]	[+ o]	

This type of ditransitive is found in many familiar languages in which dative case marking distinguishes the beneficiary/maleficiary argument from the patient/theme, e.g. most (though not all) Slavonic languages. Morphosyntactic properties of this ‘structural dative’ argument, which I will exemplify and discuss in more detail, include optionality and impossibility of promoting it to subject (as in passivisation) or changing its status to object (as in ‘dative shift’) through any argument-structure alteration in the predicate. I will argue that pattern (1) is also exceptionally found in English (e.g. ??*Peter gave John, A book was given John (by Peter)*), and I hypothesise the reasons for its occurrence.

- (2) 
$$\begin{array}{ccc} x & y & b \\ | & | & | \\ \langle \text{arg}_1 & \text{arg}_2 & \text{arg}_4 \rangle \\ [-o] & [-r] & [-o] \end{array}$$
 beneficiary as an oblique / ‘non-dative-shifted’ predicate

This pattern is also an option in Slavonic; in fact, when two different participants have similar semantics (e.g. a beneficiary and a recipient), one of them maps onto the dative argument ( $\text{arg}_3 [+o]$ ), and the other onto the oblique argument ( $\text{arg}_4 [-o]$ ), resulting in a valency frame with two beneficiary-like arguments (examples of this will be provided). Modern English, which does not mark its beneficiaries for dative, also makes use of this pattern (e.g. *Peter gave/handed a drink to John*, *Both parents cooked supper for the children*). The third argument position ( $\text{arg}_3$ ) is not invoked in English: English has lost the morphological means to distinguish this argument from the primary object and hence base predicates treat beneficiaries as obliques. Note the lack of syntactically intransitive English clauses comprising only subjects and datives but no direct objects: *\*Both parents cooked the children* meaning: ‘Both parents cooked for the children’; and the ungrammaticality of the attempted dative in: *He sold three cars (\*John)*, *He gave the book (\*me/him)*.

- (3) 
$$\begin{array}{ccc} x & b & y \\ | & | & | \\ \langle \text{arg}_1 & \text{arg}_2 & \text{arg}_3 \rangle \\ [-o] & [-r] & [+o] \end{array}$$
 beneficiary as a derived dative / ‘dative-shifted’ predicate

I argue that dative shift is an operation on argument structure which alters the mapping of the semantic participants of the predicate onto argument positions by remapping the beneficiary onto the primary object position, and ‘downgrading’ the theme/patient to the secondary object position. This analysis accounts for the passivisability patterns of the non-dative-shifted and dative-shifted predicates, and I will also discuss its desirable consequences with regard to the Asymmetric Object Parameter.

Dative shift increases the transitivity of the base mono-transitive predicate by adding an ‘objective’  $[+o]$  argument to its valency frame. Thus, through dative shift, some verbs in English are capable of recovering their dative argument position. The arguments are ordered according to LMT’s atomic values  $[+/- r/o]$ , and the new argument slot occupies a position that conforms to this ranking. The semantic participants map onto the new set of argument positions in a way that matches the sets of semantic entailments produced by the derived predicate (e.g. ‘handed-to’, ‘cooked-for’, in *Peter handed John a drink*, *Both parents cooked the children supper*, cf. Bresnan 2001:315-316). Dative shift has also been observed in Kanuri (Bresnan 2003; Bresnan & Nikitina 2003/2007), except only with respect to one verb (‘give’), and only when the beneficiary is 1st or 2nd person.

#### (B) Constructions with applied beneficiaries:

Many languages do not have the option of expressing the beneficiary as an oblique argument, as in (2), and their strategy to bring beneficiaries and other peripheral participants into the verb’s lexical meaning is the transitivity applicative. I argue that the transitivity applicative adds an argument pre-specified as  $[+o]$  to the valency frame of the base predicate. In this respect, it is like dative shift (to which this construction has been likened in the literature), except that it is accompanied by dedicated verbal morphology. Applicative formation increases the transitivity of the base verb, and allows the semantic participants to map onto the new set of argument positions in a way that matches the entailment sets produced by the derived predicate (e.g. ‘eat-for’ when a beneficiary is added; ‘eat-with’ when an instrument is added; etc.).

The ‘applied’ participant is typically mapped onto the second argument position of the primary object (which enables it to become a passive subject), and the resulting construction can be modelled as in (3) above. When the applied participant is a beneficiary, the construction may be referred to as ‘**dative-shifted predicate with an applied beneficiary**’. If this is the only mapping option available for the beneficiary in a language, the language is referred to as ‘asymmetric’ (e.g. Chicheŵa; note that English is also ‘asymmetric’, even though its beneficiaries are not applied).

However, in some languages, the entailment sets corresponding to the two object positions ( $[-r]$  and  $[+o]$ ) allow the peripheral participant and the patient/theme to re-align and map in either way. Whichever participant maps onto the primary object position ( $[-r]$ ) may become a passive subject and has other properties of primary objects (Bresnan & Moshi 1993:59-61). Such languages are referred to as ‘symmetric’ (e.g. Kichaga), and when their applied beneficiary is mapped onto the primary object position, the option can be modelled as in (1) above. The construction may then be referred to as ‘**non-dative-shifted predicate with an applied beneficiary**’. (Note that this analysis of symmetric languages avoids stipulating a non-monotonic change of information which underlies the standard LFG analysis of this phenomenon.)

In some languages, the transitivity applicative can add up to two core arguments, both in symmetric and asymmetric languages (Bresnan & Moshi 1993:52). In the proposed scheme, the second applied argument position will also be pre-specified as  $[+o]$ , and the grammatical function mapped onto this argument will be  $\text{OBJ}_0$ . The two secondary objects will be distinguished by their subscripts.

The proposed model allows a classification of languages depending on the patterns they employ for the expression of their beneficiaries. Interestingly, we find languages such as Kanuri (Hutchison 1981; cited in Bresnan 2003, Bresnan & Nikitina 2003/2007), which uses the transitivity applicative for all verbs except the verb ‘give’; for the verb ‘give’, the non-applied pattern (1) is used when the beneficiary is 3rd person, and the non-applied patterns (2) & (3) are used when the beneficiary is 1st or 2nd person. This person split (crosslinguistically not uncommon) affects the coding of arguments in other Kanuri constructions, too.