ON THE SYNTAX OF DITRANSITIVE CONSTRUCTIONS

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Abstract

This paper deals with modelling the argument structure of constructions with two internal arguments expressing a beneficiary/recipient and a patient/theme. It offers an analysis of the dative shift which captures both the alternative grammatical function mappings and the altered semantics of the participants of the related predicates. The LMT variant used assumes that semantic participants are sets of semantic entailments of the predicate (Dowty 1991, Ackerman & Moore 2001) and that it is the syntactic representation of the predicate's valency, rather than a hierarchy of thematic roles, that remains constant in the model (Zaenen 1993, Ackerman & Moore 2001). Specifically, instead of fixing the thematically ordered participants and allowing them to change syntactic pre-specifications (which can lead to violations of monotonicity), the proposed model keeps constant the syntactic argument positions with their fixed pre-specifications and allows the semantic participants to re-align with them. Such alternative alignments represent changes in the semantics of the predicate which are recognised when the predicate undergoes dative shift or applicative transitivisation. Since in the proposed model only those objects which are capable of becoming passive subjects are [–r] (other objects are [+o]), the model straightforwardly supports the correct prediction of the theory of object asymmetries (Baker 1988, Bresnan & Moshi 1990) that, when an argument can be a passive subject, it can also be expressed as an object marker in the active – but it does not make the incorrect prediction that the reverse will hold, too. It also concurs with Alsina's (1996a) account of the distribution of objective properties other than passivisability; this is regulated by additional constraints which are often semantic in nature and have to be determined on a language-by-language basis. Finally, by unifying analyses of the non-applied dative and benefactive applicatives, the model provides LMT support for the special morphosyntactic status of the dative as the 'third structural position'.

1 The argument structure of ditransitive predicates

The constructions under consideration 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', and 'tell' (Haspelmath 2005:426), 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 new analyses of the dative alternation and constructions with applied recipients/beneficiaries.[1]

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 adequately accounting for the dative alternation (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

[1] I wish to thank Cynthia Allen, Alex Alsina, Matthew Baerman, Dunstan Brown, Greville Corbett, Mary Dalrymple, Helge Lødrup, and Joan Maling for their very helpful questions, comments and discussion, which have led to clarifications and improvements. That is not to say that they share all the views presented here.

(Bresnan 2003:71; Bresnan & Nikitina 2003/2007). In response to the second observation, Bresnan and colleagues apply a probabilistic approach to the dative alternation phenomenon, and successfully model the constraints behind the choice of the alternating variant – that is, they explain what drives the dative alternation. In the present paper, I offer a solution to the first problem by providing a theoretically satisfactory model of the dative alternation within Lexical Mapping Theory (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) argues that the problem with the standard LFG account of the dative alternation (Bresnan 1978, 1982) is the assumption that the rules deriving the alternation are restricted to the information available in the lexical entries of verbs. However, the principles of function-argument correspondence proposed in LMT do exploit the semantics of lexical argument structures and allow us to tackle the polysemy of the alternating variants of ditransitive verbs. The problem lies in the fact that the most widely accepted models of LMT collapse the syntactic level of argument positions and the semantic level of thematic roles into one level of representation, which renders such models incapable of capturing any complex relationship which involves both a semantic and a syntactic alternation between related lexemes. On the widely accepted LMT analysis of the dative alternation, the arguments (identified by their thematic roles) are assumed to be the same between the two variants, therefore the same thematic roles, the beneficiary/recipient and the patient/theme, have to be pre-specified differently for the two variants to achieve the required grammatical function mappings. The following analysis is from Bresnan (2003:14-15), but see also Bresnan (2001:315), Falk (2001:113), and others:

(1) a. *I gave them cheques.*

b.

gave$_1$	⟨ *ag*	*ben*/*rec*	*pat*/*th* ⟩
	[–o]	[–r]	[+o]
	|	|	|
	SUBJ	OBJ	OBJ_θ

(2) a. *I gave cheques to them.*

b.

gave$_2$	⟨ *ag*	*ben*/*rec*	*pat*/*th* ⟩
	[–o]	[–o]	[–r]
	|	|	|
	SUBJ	OBL_θ	OBJ

This theoretical shortcoming becomes even more apparent in another situation, found in Kanuri and discussed by Bresnan (2003:17-20), where two different argument structure representations, such as (1b) and (2b), are required for a verb with no change of meaning other than the change of the person of the recipient (1st & 2nd persons versus 3rd person, respectively; see section 4.3 below).

Another problematic solution is widely adopted for applied benefactives in so-called symmetric languages such as Kichaga (Bresnan & Moshi 1990/1993) which have an alternating passive (this term is due to Alsina 1996a). In Kichaga, a transitivising applicative adds a beneficiary/recipient (assumed to be pre-specified as [–r]) to the argument structure of the predicate, but passivisation patterns show that both the beneficiary/recipient and the patient/theme must be pre-specified as [–r], since either argument can become a passive subject. The standard analysis of the Kichaga benefactive

offers the argument structure in (1b) for the active (Bresnan & Moshi 1993:76-77, ex. 69), and a 'symmetric' argument structure as in (3), with two [–r] arguments, for the passive (Bresnan & Moshi 1993:77, ex. 70):

(3) 'eat-for$_{passive}$' ⟨ *ag* *ben*/*rec* *pat*/*th* ⟩
[–o] [–r] [–r]
∅ | |
OBJ SUBJ
or: SUBJ OBJ

The main problem with this analysis, so far overlooked, is that it requires a non-monotonic change of information by assigning different pre-specifications ([+o] or [–r]) for the active and passive variants of the same applicative predicate. Even though LMT does allow either the [+o] or the [–r] pre-specification for a 'patient-like' argument, the active and passive variants of a predicate cannot normally arise from two different argument structures, that is, from two predicates with different sets of pre-specifications.

A further issue with this analysis is due to the fact that two alternative a-structures are posited for one of the passive variants of the applicative, the one with the beneficiary as a passive subject. One of the a-structures is that given in (3), with the beneficiary expressing the SUBJ and the patient/theme expressing the OBJ. However, since passivisation is normally also expected to operate on the active represented in (1b) (see e.g. Bresnan & Moshi 1993:78, ex. 71), the passive of (1b) has the same lexical outcome as the passive mapping option in (3) just described, even though there does not appear to be any empirical evidence to support two different a-structure analyses of that outcome.

In the following sections I outline an alternative model of the argument structure of ditransitives and the dative alternation, which accounts for the data discussed in the literature without having to compromise monotonicity.

2 The choice of an a-structure model

It is generally accepted that the dative alternation brings about a change in the morphosyntactic manifestation of the (same set of) semantic dependents of a predicate – see for example Sadler & Spencer (1998:209-210), who for this reason call the dative alternation 'morphosyntactic'.[2] However, it is also agreed (e.g. Bresnan 2001:315, 2003:9) that, apart from resulting in a different grammatical function mapping, the alternation should also be regarded as meaning-altering – hence 'morphosemantic'. It can also be valency-increasing (e.g. in the applicative).

In order to capture these properties of the dative alternation, I use a slightly revised model of LMT. 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 mediates 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 but not as discrete thematic roles which are part of the lexical entry of verbs (see also Dowty 1991, Hudson 1991, Primus 1999, and Beavers 2006). Following Zaenen (1993:151) and Ackerman & Moore (2001:44ff), I argue that the point of reference which should remain constant in modelling argument structure is the *syntactic* representation of the predicate's

[2] Alternatively, 'morphosyntactic' can refer to operations such as passivisation, which affect only the 'default' argument-to-function mapping but not the lexical or semantic levels of representation of the predicate (hence are not meaning-altering). In this case, the dative alternation is better termed 'morphosemantic', since it is also meaning-altering. See Kibort (2007) for discussion.

valency rather than the *semantic* representation of thematic roles with which argument positions are linked. I assume that the following valency template is available to a base predicate:

(4) $< \underset{[-o/-r]}{arg_1} \quad \underset{[-r]}{arg_2} \quad \underset{[+o]}{arg_3} \quad \underset{[-o]}{arg_4} \quad ... \quad \underset{[-o]}{arg_n} >$

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. As in all widely used models of LMT, the syntactic pre-specification of the arguments determines their availability for the mapping of particular grammatical functions. In order to retain the principle of monotonicity for the tractability of syntactic information (e.g. Bresnan 2001:45-46), I assume that the only mechanism that can intervene at the level of argument-to-function mapping is a mechanism of increasing markedness, but the primitives [+/– r/o] cannot be either changed or deleted.[3]

Argument positions are linked with particular types of predicate entailments corresponding to semantic participants; 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 (arg_n [–o] indicates the availability of multiple non-core arguments), and there are no 'empty slots' in any particular predicate's argument structure.

Within such a model of LMT, a ditransitive predicate projects three sets of semantic entailments which align with the available argument positions in the template following a well-formedness condition on linking (Ackerman & Moore 2001:44-45), as is exemplified in (5). I refer to the three key participants in a ditransitive event as: *x*, *y*, and *b*. These participants are capable of representing different possible sets of entailments of a ditransitive predicate, for example: *x* = participant with the most proto-agentive properties; *y* = participant with the most proto-patientive properties; and *b* = participant with the most proto-beneficiary/recipient properties (see Dowty 1991, Primus 1999, Ackerman & Moore 2001):

(5) $\underset{\underset{[-o]}{arg_1}}{\overset{x}{|}} \quad \underset{\underset{[-r]}{arg_2}}{\overset{y}{|}} \quad \underset{\underset{[+o]}{arg_3}}{\overset{b}{|}}$

$< \quad >$

Note, however, that in a derivationally related predicate, the same participants may express different semantic roles, corresponding to different sets of entailments projected by the predicate. Therefore, in representations of related predicates, the letters (which are kept the same) indicate that the participants in the event remain the same, even though they may be expressing different semantic roles in the two predicates.

Changes in the semantics of related predicates which result from an addition (as in applicatives, for example) or deletion (as in anticausatives or inchoatives) of a participant role, are not regarded in mainstream LFG as breaking monotonicity.[4] If it is accepted that

[3] See Kibort (2007) for a more detailed account of the revised model of argument structure and Lexical Mapping Theory. Note also that subscripts here are only a memory aid, helping visualise and later recall the ranking of the argument slots. It is the linear order in the representation of the argument structure that gives us the ranking information, not the subscripts.

[4] See section 5, and also Baker (1983/2005:26-27), Levin & Rappaport Hovav (1995:108), Ackerman & Moore (2001:11), and other LFG work on mapping from lexical semantics to a-structure, or on morphosemantic as opposed to morphosyntactic operations.

the dative alternation results from a change at the semantic level of the predicate, where the same participants can alternate between two different sets of semantic roles, this change can also be captured with a pre-syntactic mechanism which does not compromise monotonicity, such as a mechanism re-aligning participants with argument positions.

It is worth noting that some mainstream LFG analyses already implicitly adopt re-evaluation of the semantics of the participants between related predicates.[5] For example, representations given in (1b) and (2b), from Bresnan (2003:14-15), could be interpreted as representing the fact that the same two participants, identified as *ben*/*rec* and *pat*/*th*, express somewhat different roles in the two variants: Bresnan expands her label for *them* in (1a) as 'recipient/possessor', and the label for *to them* in (2a) as 'recipient/goal'. Therefore, if $gave_1$ and $gave_2$ have related lexical entries, the relation has to be accounted for at some level involving semantics (for example the lexical-conceptual structure). It is at this level that at least one of the participants has to be allowed to change its semantic interpretation, and this level obviously has to interface with the syntactic argument structure represented in (1b) and (2b). Similarly, Alsina (1996a:699, ft. 12) suggests that in applied instrumentals in Fula, the applied instrument participant must be syntactically pre-specified as 'non-objective' (non [–r]) when it co-occurs with another internal argument (patient/theme), but may bear a different pre-specification in other contexts in the same applicative predicate. This suggestion also implies a re-evaluation of participant semantics that has to occur at a semantic or lexical-conceptual level interfacing with argument structure, and thus supports the dissociation of argument positions and semantic roles, as proposed here.

3 Patterns of alignment in ditransitives

Keeping constant the (fixed) valency template which was given in (4), and the three participants which are relevant for a ditransitive event, we find three different patterns of alignment between participants and argument slots in ditransitive predicates, indicated [1], [2], and [3]. The patterns are identified on the basis of morphosyntactic behaviour, such as the ability to passivise, and also morphological expression, such as marking with a particular structural case:

(6)

	x	*y*	***b***	
	|	|	|	
<	arg_1	arg_2	arg_3	>
	[–o]	[–r]	**[+o]**	

[1] beneficiary as a canonical dative

(7)

	x	*y*	***b***	
	|	|	|	
<	arg_1	arg_2	arg_4	>[6]
	[–o]	[–r]	**[–o]**	

[2] beneficiary as an oblique

[5] This can only be done implicitly in most commonly used models of LMT because of the fusion of the syntactic level of argument positions and the semantic level of thematic roles.

[6] The gap in the representation of this argument frame is another memory aid. Theoretical significance is attributed to the rank of a particular argument position, and the gap only serves as a reminder to the reader that the third encountered argument of this predicate occupies an oblique slot – the argument only qualifies for an oblique, but not for a structural dative (the third argument position).

(8) *x* ***b*** ***y*** **[3]** beneficiary as a shifted dative

	<	arg_1	arg_2	arg_3 >
		[–o]	**[–r]**	**[+o]**

I suggest that the third argument position in the valency template, that of the 'secondary object', is perfectly suited to the expression of what is often referred to as the 'structural dative'. I concur with numerous researchers who believe that the dative has special status, between a core argument (it has morphosyntactic properties that clearly distinguish it from obliques – see further below) and an oblique (it is not obligatory). It can be regarded as a 'structural' argument if its morphological expression does not follow from an idiosyncratic (semantic) property of a particular class of verbs, but instead it fills a regular structural position which is available to all predicates in languages that have a dative.

If no suppression or morpholexical/morphosyntactic operation (such as passivisation) intervenes, by LMT's Mapping Principles arg_1 becomes SUBJ, arg_2 becomes OBJ, arg_3 becomes OBJ_θ, and arg_4 becomes OBL – regardless of which participants they express (it is assumed that the semantic properties of each participant match the appropriate set of entailments projected by the predicate). If, however, passivisation is applied to the predicates, the argument in the primary object position (arg_2) becomes the passive subject, and so on, following the Mapping Principles.

4 Constructions with non-applied beneficiaries

In this section I discuss patterns [1]-[3] as they are found in non-applicative constructions.

4.1 'Plain dative'

Pattern [1], repeated here from (6), is found in many familiar languages which distinguish the beneficiary/maleficiary argument from the patient/theme by case or other marking. For example, in most Slavonic languages beneficiaries are distinguished from themes by their dative case (Primus 1998:450),[7] and in Catalan beneficiaries expressed through third person pronominal clitics are marked for dative case, while nominal beneficiaries are marked with a preposition (Alsina 1996b:149-169). Evidence provided by Allen (2001:44-48, 55, 57) demonstrates that pattern [1] was also present in Old English until the beginning of the 13th century, becoming less frequent after that time and finally disappearing by the last quarter of the 14th century:

(9) *x* *y* ***b*** **[1]** beneficiary as a canonical dative

	<	arg_1	arg_2	arg_3 >
		[–o]	[–r]	**[+o]**

[7] According to Primus (1998:450), the dative is found in Belarusan, Czech, Kashubian, Polish, Russian, Serbo-Croat, Slovak, Slovene, Ukrainian, and Upper Sorbian. It is also found in Lower Sorbian (Greville Corbett, personal communication). Moreover, full pronouns and clitics of Bulgarian and Macedonian have dative forms and therefore these languages may also be using pattern [1], like Catalan – however, I leave this hypothesis for further study. Since pronominal arguments often behave differently from full-NP arguments (see, for example, Haspelmath 2005), it is also possible that different syntactic patterns may be available for these two types of expression within a language.

Morphosyntactic properties of arg_3 as the structural dative include: dedicated morphology (usually dative case); availability for all predicates (with a benefactive/malefactive or other related meaning, e.g. an ethic dative); 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; unavailability for raising; optionality; typically, resistance to multiplication (e.g. in Polish); and importantly, the ability to retrieve the causer/instigator after lexical detransitivisation (specifically, by presenting the causer as an experiencer).

Below are some examples of datives in Polish, where (10a) is the active variant of pattern [1], (10b) is the passive variant of this pattern, (10c) illustrates the impossibility of making arg_3 a passive subject, and (10d) illustrates that the dative argument can be placed pre-verbally for topicalisation or focus purposes, both in active and passive clauses (this example shows the passive) and any other type of clause (e.g. a morphological impersonal, or a clause with a raised subject); however, if the participant expressed through the dative were to become the syntactic pivot of the clause, a different verb would have to be selected to achieve the required (SUBJ) mapping for this participant (e.g. '[Peter] received'). Finally, (10e) shows a randomly chosen different verb, not typically ditransitive, with a dative; the sentence on the right exemplifies a dative referring to 'self' which can be added to any predicate:

(10) a. *Jan wręczył kartę Piotrowi.*
John.NOM handed.MASC card(FEM).ACC Peter.DAT
'John handed the card to Peter.'

b. *Karta została wręczona Piotrowi* (*przez Jana*).
card(FEM).NOM became.FEM handed.FEM Peter.DAT (by John)
'The card was handed to Peter (by John).'

c. **Piotr został wręczony kartę* (*przez Jana*).
Peter.NOM became.MASC handed.MASC card(FEM).ACC (by John)
(intended) 'Peter was handed the card by John.'

d. *Piotrowi została wręczona karta* (*przez Jana*).
Peter.DAT became.FEM handed.FEM card(FEM).ACC (by John)
'To Peter was handed the card (by John).'

e. *Czytam tobie/ci wiersz.* / *Czytam sobie/se*[8] *wiersz.*
read.1SG you$_{strong/weak}$.DAT poem.ACC / read.SG self[REFL]$_{strong/weak}$.DAT poem.ACC
'I am reading you a poem.' / 'I am reading to myself a poem.'

Examples in (11) below, also from Polish, are all anticausative and show how a deleted causer/instigator can be retrieved and brought back to the syntax through the dative argument. (11a) has anticausatives without a dative – I argue that, at least for Polish, these should be analysed as derived from the transitive variants of 'break' and 'spill' (see Kibort 2004:33-48 for discussion). In (11b-c), the dative expresses the causer/instigator of the event: it is the participant who 'broke' and 'spilt', even though unwillingly. Thus, while the causative variants of 'break' and 'spill' entail a wilful causer (i.e. agent), the anticausative variants of these predicates may entail an unwilful causer. If it is agreed that the causative and anticausative variants of these predicates are related, the causer participant is the same in both, even though it bears two different roles to match the different sets of entailments projected by the two predicates. Example (11d) illustrates a dative in a middle clause, which is a variant of the anticausative (see Kibort 2004:203-205), and (11e) is an example of an anticausative formed from an intransitive verb ('to

[8] *Se* is colloquial, as well as found in dialects.

gain weight'), also with a dative; indefinitely many more such examples could be provided, as the dative in Polish is very productive:

(11) a. *Szklanka się zbiła.* / *Wylała się zupa.*
glass(FEM).NOM REFL broke.FEM / spilt.FEM REFL soup(FEM).NOM
'A/The glass broke.' / 'The soup has spilt.'
b. *Zbiła mi się szklanka.*
broke.FEM me.DAT REFL glass(FEM).NOM
'A/The glass broke to/on me.' (= I broke a/the glass unintentionally.)
c. *Piotrowi wylała się zupa.*
Peter.DAT spilt.FEM REFL soup(FEM).NOM
'Soup has spilt to Peter.' (= Peter has spilt the soup unintentionally.)
d. *Ten sweter dobrze nam się pierze.*
this.MASC jumper.MASC well us.DAT REFL washes
'This jumper washes well to us.' (= We find it easy to wash this jumper.)
e. *Ale się Piotrowi utyło.*
how REFL Peter.DAT gained-weight.3SG.NEUT
'How it has gained weight to Peter.' (= How Peter has gained weight!)

The dative as described here – that is, as the third structural case – appears to be a typologically restricted phenomenon (see also Primus 1998). Many languages with rich case systems lack this structural position. In such languages, all other cases apart from those expressing the subject and the object are treated as semantic cases (and a morphological dative case may be expressing a semantic case). Conversely, since in this and other models of LMT morphological cases and grammatical relations are treated as distinct concepts, it is also possible that an argument morphologically marked for dative case in the active may be a subject or an object, and as an object it may be passivisable.

I propose that pattern [1] is also exceptionally found in English, in the following marginally grammatical constructions which are dispreferred but borderline acceptable. First, it is found in the active, with several typically ditransitive verbs including *give*, *send*, and *tell*, though only with pronominal objects and datives (*give it me*, *tell it you*, etc.), as in *When you come home, you can give it me back*, *A good policeman will sit you down and tell it you his way.* In the British National Corpus (BNC) examples of this type come mostly from spoken English, or they are quotes of older, pre-20th century texts. Second, pattern [1] is also exceptionally found in English passive clauses, with the same type of verbs as above. The following examples, drawn from various sources, were compiled by Hudson (1992:257):

(12) a. ?*Those sweets were given the children by Anne.* (Hudson 1992:257)
b. ?*A book was given John.* (Jaeggli 1986:596)
c. ?*A gold watch was given Jones by the railway when he retired.* (Anderson 1988:300)
d. ?*No information is given the model about word classes.* (Arbib & Hill 1988:63)
e. ?*The fault was forgiven him by me.* (Nesfield 1916:46)
f. ?*Two pounds were allowed him by us.* (Nesfield 1916:46)

It is worth noting that the two examples using verbs other than *give* come from 'a very traditional grammar' (Hudson 1992:257) published in 1916. Although most English speakers find sentences in (12) unacceptable, some – particularly British speakers – accept them quite happily. A handful more examples can be found in the BNC, by searching for strings such as *was*/*were*/*be*/*been* + $\text{verb}_{\text{pass.part}}$ + *me*/*you*/*him*/*her*/*us*/*them*. The verb *given*

in this combination currently returns 11 examples (e.g. *He was given them for what he himself described as a ridiculously cheap price*), *told* returns 9 examples (e.g. *Sweeting also confirmed that the Miss Johnson story originated from his aunt who, as he wittily put it, 'could only know what was told her'*), *sent* returns 4 examples (e.g. *He asked them to do their homework with the schemata to be sent them, for the Church had no time to lose*), and *shown* returns 3 examples (e.g. *Another small farm was shown me as the place where...*). Similar examples are also readily found online.

As suggested by Allen (2001), the loss of case marking in English (particularly the loss of the distinction between the nominative and the dative which had already been in progress in the second half of the 11th century and was completed in the majority of extant texts outside of Kent by around 1200) may have encouraged subsequent generations of learners to rely more and more on constituent order for matching up the grammatical and semantic relations of a clause. For nearly two and a half centuries we find examples of two orders of postverbal bare nominals: verb + theme + recipient; and verb + recipient + theme, alongside two orders in which the recipient is expressed through a prepositional phrase. However, already at the beginning of the 13th century, when the accusative versus dative distinction had disappeared from most dialects of English, verb + recipient + theme gradually becomes the preferred order, and eventually the verb + theme + recipient order disappears from texts by the last quarter of the 14th century. Allen argues convincingly that it was the loss of this order that led to the fixing of constituent order in English and the reanalysis of the recipient argument as a direct object, as in (1b) – which corresponds to pattern [3] (example (8)).

Allen's analysis lends support to the model of ditransitives proposed here. Through a series of changes described by Allen, English has largely lost the category of the dative with its special morphosyntactic properties, and has to resort to pattern [2] (example (7)) to express the order verb + theme + recipient. Dative shift in modern English demonstrates, however, that English has retained the usability of the syntactic slot for the dative in its argument structure template: the third argument position of the dative can normally be resurrected through the dative alternation, which results in pattern [3].

Furthermore, just as it is possible for a special form to persist in a language as a fossil of old morphosyntax, I suggest that examples such as *You can give it me back* and *Those sweets were given the children*/*them by Anne* can be analysed as fossils of the structural dative in English, corresponding to Polish (10a) and (10b), respectively. It appears that the non-derived structural dative, as in pattern [1], may have persisted in English with a restricted number of predicates, especially when their objects are expressed through pronouns.

4.2 'Non-dative-shifted' predicates with an oblique beneficiary

Pattern [2] repeated from (7), corresponding to the mainstream LFG analysis in (2a), is found in English 'non-dative-shifted' clauses:

(13)

	x	*y*	***b***	
	|	|	|	
<	arg_1	arg_2	arg_4	>
	[–o]	[–r]	**[–o]**	

[2] beneficiary as an oblique

I suggest that the third argument position is not normally invoked in modern English for base verbs; English has lost the morphological means to distinguish this argument from the primary object, lost the pattern in [1], and switched to recovering syntactic relations on the basis of configuration. Hence most base predicates in modern English express

beneficiaries only as obliques:

(14) a. *Peter gave/handed a drink to John.*
b. *Both parents cooked (supper) for the children.*

Besides languages with a structural dative, like Polish, and languages with dative shift, like English, languages may lack restricted objects altogether and be able to express their beneficiaries/recipients only through a prepositional phrase.[9] On the other hand, pattern [2] is also found as an option in Slavonic. Compare the following Polish sentences, one with a dative, and another with an oblique argument expressing the beneficiary:

(15) *Zrób mi ciasto.* / *Zrób dla mnie ciasto.*
make.IMPER me.DAT cake.ACC / make.IMPER for me cake.ACC
'Make me a cake.' / 'Make a cake for me.'

When two different participants in the event have similar semantics – let us call them a 'beneficiary' and a 'recipient' – and each qualifies for both sets of entailments (of arg_3 and arg_4), the valency frame can accommodate both:

(16) a. *Zrób mi ciasto dla gości.*
make.IMPER me.DAT cake.ACC for guests.
'Make me a cake for my guests.'
b. *Zrób dla mnie ciasto gościom.*
make.IMPER for me cake.ACC guests.DAT
'Make for me a cake for my guests.'

4.3 'Dative-shifted' predicates with a primary object beneficiary

Pattern [3], repeated from (8), is found in English 'dative-shifted' clauses and concurs with the widely accepted LFG analysis in (1b):

(17)
	x	***b***	***y***	**[3]** beneficiary as a shifted dative
	|	|	|	
<	arg_1	arg_2	arg_3	>
	[–o]	**[–r]**	**[+o]**	

Within the model of LMT proposed here (see section 2), the 'shift' can be understood as the re-alignment of two of the participants in the event, in order to match different sets of entailments projected by the altered predicate.

Specifically, I propose that the dative shift is an operation on the argument structure of a base predicate, such as the structure represented by pattern [2], which 're-maps' the beneficiary/recipient participant onto the primary object position (arg_2) and 'downgrades' the theme/patient to the secondary object position (arg_3). Within the proposed model, the re-alignment of the participants is pre-syntactic – it is a derivation at lexical-conceptual structure that alters the semantics of the predicate – hence monotonicity need not be jeopardised. The proposed analysis accounts correctly for the passivisability patterns of both non-dative-shifted and dative-shifted predicates.

[9] According to Primus (1998:441), this situation is found in many European languages including Romance languages, Bulgarian and Macedonian, Modern Greek, Maltese, Welsh and Irish. However, this statement is not true if pronouns in any of these languages have dative forms and may occur in pattern [1]. As before, I leave this issue for further research.

The mechanics of the dative shift within the proposed model can be elaborated as follows: dative shift increases the transitivity of the base (mono-)transitive predicate by adding an 'objective' [+o] argument to its valency frame. Note that before such an addition, the predicate's valency frame, represented in pattern [2], contains an oblique argument and no argument in the third argument position. Thus, for a predicate which is lexicalised as in pattern [2], the arg_3 position exists only as an option in the general template, but is not invoked in the predicate itself (hence, there is no 'empty slot' in the predicate's argument structure). For a dative-shifted predicate, the three semantic participants (*x*, *y*, and *b*) map onto the new set of argument positions in a way that matches the sets of semantic entailments projected by the derived predicate (e.g. *handed-to*, or *cooked-for* in *Peter handed John a drink*, *Both parents cooked the children supper*; cf. Bresnan 2001:315-316). The argument slots in the valency template are ordered according to LMT's atomic values [+/– r/o], so when new sets of entailments are projected by the altered predicate including a new core argument, the new argument's valency slot (arg_3) is found occupying a position that conforms to this ranking.

Like the non-derived dative, the shifted patient/theme in arg_3 position in pattern [3] also has some distinctive properties. Even though it is the argument in arg_2 ([–r]) position which is capable of becoming the passive subject, this is its only objective property – that is, the shifted beneficiary's only objective characteristic is its passivisability. Objective properties of the shifted patient/theme in arg_3 position include availability for (long-distance) extraction and availability to be substituted in idioms (see Hudson 1991, 1992 for a detailed account of the differences between the two objective arguments in the dative shift construction in English).

According to Primus (1998:440ff), the dative shift is found in English, Dutch, Swedish, Norwegian, and Frisian – all of which have lost the morphological distinction between dative and accusative. Although the dative shift is not an applicative construction, it has also been observed in an otherwise applicative language, Kanuri (Hutchison 1981, Bresnan 2003, and Bresnan & Nikitina 2003/2007), but only with respect to one verb ('give'), and only when the beneficiary is 1st or 2nd person:

> The verb *yí+* 'give' (group 3 of class 1 verbs) is very commonly used with the object affixes applied to its basic form (I). In this use it is a bit irregular since one would expect the object affixes to indicate direct objects. For this verb however they indicate the indirect objects or recipients of the action of the verb, even though the verb is **not** also marked with the applied (II) derivational morpheme. (Hutchison 1981:136)

The proposed analysis of constructions represented by patterns [2] and [3] is only slightly different from the most widely accepted LFG analyses, but offers some clear advantages. First, it captures the special morphosyntactic status of the dative as the third structural case, both in languages that currently have it (Slavonic) and those that have lost the morphology to distinguish it (languages with the dative shift).

Second, it accounts for fossils such as *A book was given John*, which are treated here as pattern [1] with *John* occupying the position of a canonical dative, but are problematic for standard LMT. In mainstream LMT, the bare nominal *John* (a beneficiary expressed as the primary object) should normally be analysed as [–r], while, by comparison, *to John* (a beneficiary as an oblique) is normally analysed as an [–o]. However, *John* in *A book was given John* cannot be pre-specified as [–r], since this pre-specification is already borne by the passive subject *a book*, and English is claimed to obey the Asymmetrical Object Parameter (AOP) which disallows argument structures with two unrestricted [–r] arguments (Alsina & Mchombo 1988, Bresnan & Moshi 1990). The analysis proposed

here avoids this problem, and the only requirement is that some typically ditransitive predicates such as 'give' are allowed optionally to project an alternative set of entailments which invokes the third argument position in the valency template without resorting to dative shift.

Finally, when considered a part of a larger system of phenomena which includes benefactive applicatives, the proposed analysis avoids the problems (mentioned in section 1) found with the mainstream LFG analysis of symmetric languages which have an alternating passive, e.g. Kichaga. These problems include allowing an argument to change its intrinsic classification for the active and passive variants of the applicative (i.e. breaking monotonicity), and positing two alternative a-structures for the same passive variant of the applicative. The solution offered here will be discussed further in section 5.3.

5 Constructions with applied beneficiaries

Many languages do not have the option of expressing the beneficiary as an oblique argument, as in pattern [2], and their strategy to bring beneficiaries and other peripheral participants (instruments, locations) into the verb's lexical meaning is the transitivising applicative.

In standard LMT, the applicative is analysed as adding a new role to the theta structure of a verb, below the highest role. Semantic roles of applied arguments normally receive the [–r] classification, so that they can emerge as passivisable objects; furthermore, theme/patient and applied roles except the applied beneficiary can alternatively be classified as [+o] (Alsina & Mchombo 1989; Bresnan & Moshi 1993:71-72).

Within the model of LMT proposed here, I suggest that the transitivising benefactive applicative adds an argument pre-specified as [+o] to the valency frame of the base predicate. In this respect, it is like the dative shift (section 4.3 above), except that it is accompanied by dedicated verbal morphology. It has been likened to the dative shift in the literature, though typically with the added emphasis that the morphosyntax of applicatives is much more complex (like a 'game of chess [is] to checkers', Bresnan & Moshi 1993:48).

The mechanics of the applicative formation within the model of LMT proposed here can be elaborated as follows: the applicative 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 projected by the derived predicate (e.g. 'eat-for' when a beneficiary is added; 'eat-with' with an instrument is added; 'eat-at' when a location is added; 'eat-because-of' when a motive is added).[10]

In the sections below, I first deal with pattern [2], then move on to pattern [3], and finally discuss pattern [1], as they are found in applicative constructions.

5.1 'Non-dative-shifted' predicates with an oblique beneficiary

Pattern [2], repeated here from (7), is not usually available in languages which have to use applicative derivation to introduce their beneficiary (or other peripheral participant) to the verb's valency frame:

[10] The account of applicative formation proposed here does not preclude analyses of other (possibly but not necessarily applicative) constructions where it may be appropriate to suggest that instead of an argument pre-specified as [+o], an argument pre-specified as [–r] or [–o] is added to the valency frame of the predicate.

(18)
	x	*y*	***b***
	|	|	|
<	arg_1	arg_2	arg_4 >
	[–o]	[–r]	**[–o]**

[2] beneficiary as an oblique

The identification of the beneficiary as a core, rather than oblique, argument can usually be achieved independently of the type of marking used for the applied argument, which can be case or an adposition.

It remains to be investigated whether pattern [2] can be found in an applicative construction in any language. One area of investigation might perhaps be the so-called 'modal' applicative *-ir* in Fula, which adds an instrument argument to the verb's valency frame, and where the added argument may be expressed either as a prepositionally marked oblique or a prepositionless core nominal (object) (e.g. Klaiman 1991:51-52).

5.2 'Dative-shifted' predicates with a primary object beneficiary

In constructions with applied beneficiaries, the applied participant is typically (though not necessarily – see next section) mapped onto the second argument position of the primary object (arg_2), and the resulting construction can be modelled as pattern [3], repeated here from (8):

(19)
	x	***b***	***y***	
	|	|	|	
<	arg_1	arg_2	arg_3	>
	[–o]	**[–r]**	**[+o]**	

[3] beneficiary as a shifted dative

For some languages, this may be the only option available for the mapping of the beneficiary participant. When pre-specified as [–r], the beneficiary argument is a primary object in the active, and can become a subject in the passive.

Languages which allow only one of their internal arguments – the beneficiary, but not the patient/theme – to have these properties, were in an earlier literature referred to as asymmetric (e.g. Bresnan & Moshi 1990, and references therein). Examples included Chichewa (though only with regard to the benefactive and instrumental applicatives, not the locative applicative – see next section), as well as English (even though its beneficiaries are not applied). The reason for classifying English as asymmetric is that its other option for the expression of the beneficiary is as an oblique – hence pattern [3] is the only way in which both a beneficiary and a patient/theme can be realised in English as internal arguments (except for a handful of typically ditransitive verbs through which some speakers have fossilised the Old English morphosyntax, i.e. pattern [1] which also involves two internal arguments, as discussed in section 4.1).

A difficulty that has been identified with this characterisation of 'asymmetry' is that in some languages, despite the fact that only one of the objective arguments (the applied beneficiary or the applied instrument, but not the patient/theme) can become a passive subject, other properties associated with primary objects in the active are not always found on the applied argument, but may instead be found alternately either on the applied argument, or the patient/theme. Specifically, in Bantu languages primary objects are usually identified on the basis of a cluster of 'classical' diagnostics for objecthood including: (a) passivisability – the ability to become the subject when the verb acquires passive morphology; (b) object agreement – the possibility of being expressed by means of a pronominal object prefix on the verb; and (c) word order – the ability to follow the verb immediately (see e.g. Bresnan & Moshi 1990/1993:47; Alsina & Mchombo 1993:20; Alsina 1996a:674). Furthermore, it is often assumed that the cluster of these properties

constitutes a single underlying property which is responsible for the ability of an argument to passivise, be expressed as an object marker, and be adjacent to the verb (e.g. Baker 1988, Bresnan & Moshi 1990, Alsina 1996a). However, several phenomena have been found which demonstrate that some of the correlations predicted by clustering these properties together do not hold.

The first example of a problem for the hypothesised cluster of properties is the Chichewa instrumental applicative (Alsina & Mchombo 1993; Alsina 1996a:683). In brief, a passive verb with an instrument argument in Chichewa can only have the instrument argument as its subject (not the patient/theme; Alsina & Mchombo 1993:23), and a passive verb does not allow any object markers – hence the patient/theme cannot be expressed as an object marker while the instrument is a passive subject (Bresnan & Moshi 1993:56); however, in the active, either the instrument or the patient/theme can be expressed as an object marker, and either argument can appear immediately after the verb (Alsina & Mchombo 1993:20-22). Hence the classical diagnostic (a) identifies the instrument argument as the 'primary object', but diagnostics (b) and (c) give inconclusive results.

The second example of a problem for the cluster of primary object properties comes from languages such as Runyambo, which goes one step further than Chichewa in compromising the Bantu diagnostics for objecthood. Runyambo is usually considered to be symmetric because of the ability of both of its internal arguments to be expressed as object markers simultaneously (see Alsina 1996a:692, ex. 23a, cited from Rugemalira 1991:202) and because the patient/theme is expressed as an object marker on a passive verb with a beneficiary subject – even though only the beneficiary has the ability to be a passive subject (in Alsina's 1996a terms Runyambo has a 'non-alternating passive'). In other words, in Runyambo benefactive applicatives only the beneficiary argument (not the patient/theme) can be a passive subject, but a passive verb can – in fact, has to – have an object marker expressing the patient/theme, and in the active both arguments can be expressed as object markers on the verb; the beneficiary, however, still has priority over the patient/theme in terms of word order and the ability to be expressed as a full NP as opposed to an object marker (Alsina 1996a:692-694). Hence, in Runyambo, the classical diagnostic (a) also identifies only the beneficiary argument as the 'primary object', but diagnostics (b) and (c) give inconclusive results (although they identify both internal arguments as objects in most contexts, there is some imbalance towards prioritising the beneficiary argument).

Finally, it is also worth remembering that the two internal arguments in the English dative shift construction (i.e. pattern [3] in the model offered here) have also been scrutinised for their objective properties and that it has been established that the only objective characteristic of the shifted beneficiary in English is its passivisability; the patient/theme argument in the English dative shift retains several other characteristics of an English primary object such as the availability for extraction and the unavailability to be substituted in idioms (e.g. Hudson 1992). Hence, in English, passivisability (corresponding to the classical diagnostic (a) for Bantu) clearly distinguishes one of the objective arguments of a dative-shifted clause from the other objective argument.

All the above suggest that properties associated (in a particular language or language group) with primary objects do not carry equal weight within the identified cluster of properties, and therefore may not constitute a single property which can be associated wholesale with one or more arguments of the predicate, as has often been assumed (e.g. Baker 1988; Bresnan & Moshi 1990). Furthermore, it seems clear that passivisability consistently identifies some property of an objective argument which distinguishes it from other objective arguments in an unambiguous way regardless of any other factors (in

particular, any semantic factors). On the other hand, analyses of different Bantu languages show clearly that the object agreement diagnostic and the word order diagnostic (as well as derivatives of these diagnostics, such as the order of object markers, and the availability of an objective argument to be expressed as a full noun phrase while another objective argument is expressed as an object marker) often identify contrasts between objective arguments which are due to factors such as animacy, humanness, or thematic prominence. (For detailed accounts of complex constraints due to a variety of factors of this type, in several Bantu languages, see Alsina 1996a).

Detailed analysis of Runyambo prompts Alsina (1996a:679ff, esp. section 3) to conclude that a theory which clusters object properties together does make incorrect predictions. Specifically, while an argument which can be a passive subject seems always to be able to be expressed as an object marker in the active, the reverse does not hold: there are languages such as Runyambo which allow an object marker (expressing the patient/theme) on the passive verb, and more than one object marker (expressing the beneficiary and the patient/theme arguments) on the active verb, even though only one of the internal arguments, the beneficiary, can become a passive subject. However, it is desirable, as Alsina argues, to retain the theory of object asymmetries which correlates passivisability with other objective properties, as it does enable us to capture certain strong correlations (such as the first one listed earlier in this paragraph) which would otherwise be an unexplained coincidence. The lack of correlation going in the reverse direction, observed in some languages, can be explained with additional constraints motivated by factors (usually with semantic basis) which are often independently found at work elsewhere in these languages.

The LMT model of ditransitive constructions offered here is independent of the hypothesis of whether the cluster of so-called primary object properties in a particular language or language group constitutes a single property or not. However, it does support a theory of object asymmetries which predicts that passivisability implies the ability of an internal argument to be represented by means of an object marker in the active (Alsina 1996a:681-682).

Although the LMT model proposed here is neutral about the clustering of object properties, I suggest that there is no a priori reason for assuming that the object properties that have been identified for various languages or language groups always apply wholesale. In LMT terms, both the [–r] and [+o] internal arguments are expected to have some recognisable objective properties; however, only the [–r] argument is capable of becoming a passive subject, due to its syntactic pre-specification. Therefore, when proposing a theory of object asymmetries within LMT, there is no reason to build in the additional assumption that a [–r] argument has to be expressible as an object marker and be adjacent to the verb, since the [–r] pre-specification has a consequence only for the availability of the argument to passivise; otherwise, not only the [–r] argument, but also the [+o] argument(s) may be regarded as objects in some sense (i.e. with regard to object agreement, word order, long-distance extraction, etc.).

Hence, the model offered here enables a clear distinction between languages with non-alternating passives such as Chichewa (regarded as asymmetric) and Runyambo (regarded as symmetric), and languages with alternating passives such as Kichaga (regarded as symmetric) and Kitharaka (regarded as asymmetric) – see next section for the latter. In languages with non-alternating passives, the beneficiary (or other applied argument) can only be mapped onto the primary object (arg_2) position in the language, but not the secondary object position (arg_3), with the resulting argument structure as in (19) (pattern [3]). This model also predicts correctly that an argument which can be a passive subject will be able to be expressed as an object marker in the active, but that the reverse

need not hold. In this way, the proposed model preserves the key insights of the theory of object asymmetries (specifically, that some languages may be able to alternate their passive subject, while others may not, and that the correlation between passivisability and object marking will go at least in one direction, though not necessarily in the other), and is compatible with proposals of supplementary constraints (which mostly have a semantic basis) which regulate the expressibility of arguments as object markers, the order of object NPs, and the order of object markers (see especially Alsina 1996a).

Thus, the present model correctly specifies that Runyambo benefactive applicatives – which employ pattern [3] but not pattern [1] – have a passive only with the beneficiary argument as their subject. However, as for object marking, Runyambo evidently allows both objects to be expressed as object markers. Therefore, as argued by Alsina (1996a:693-698), two additional constraints have to be posited to account for the particular pattern of expression of Runyambo's internal arguments. Alsina characterises them both by appealing to participant semantics: one constraint specifies that an object argument cannot be expressed as a full NP (but only as an object marker) unless the subject is the 'external argument', that is the argument of the active predicate with the highest thematic role; the other constraint appeals to a semantic hierarchy of thematic functions and specifies that morphologically encoded arguments cannot exhibit a mismatch in prominence between the thematic hierarchy and the grammatical function hierarchy.

Similarly, by specifying that the Chichewa instrumental applicative is also restricted only to pattern [3], the model accounts for the fact that the passive of an instrumental applicative in Chichewa can only have the instrument argument as its subject. Furthermore, I speculate that in this construction, the availability of the patient/theme argument to be adjacent to the verb or to be expressed as an object marker instead of the instrument argument may also be due to ultimately semantic (and possibly independently motivated) factors, which would not be surprising.[11]

5.3 Predicates with a secondary object beneficiary

In some languages with applied participants, for example Kichaga or Kitharaka, the entailment sets corresponding to the two object positions (arg_2 and arg_3) allow the peripheral participant and the patient/theme to re-align and map onto the argument positions in either way: either as in pattern [3] discussed in the section above, or as in pattern [1], repeated here from (6):

(20)

x	*y*	***b***	
|	|	|	
< arg_1	arg_2	arg_3	>
[–o]	[–r]	**[+o]**	

[1] beneficiary as a canonical dative

Although in languages with non-applied datives this pattern underlies non-derived predicates, in languages with applicative constructions it models derived (applicative) predicates. When pre-specified as [–r], the patient/theme participant is a primary object in the active, and may become a passive subject. I argue, therefore, that languages whose applicative constructions allow alternating passives (as defined by Alsina 1996a) are those

[11] I believe that looking for a solution to the problem of the Chichewa instrumental applicative in this direction is less controversial than the assumption made by Alsina & Mchombo (1993) that the instrument argument in this construction alternates its specification between [–r] and [+o], but the patient/theme still cannot be the passive subject of an instrumental applicative (i.e. while being [–r]) for an unexplained reason (1993:31, ft. 9).

which have both patterns [3] and [1] available for the mapping of their participants.

The following diagram (with thematic labels used to represent the participants only in order to facilitate reading) illustrates schematised mapping options in Kichaga, for a base predicate which has been subjected to applicative transitivisation:

(21)

	agent	*benef*	*pat/theme*
	agent	*instr*	*pat/theme*
	agent	*loc*	*pat/theme*
	agent	*motive*	*pat/theme*
	agent	*pat/theme*	*benef*
	agent	*pat/theme*	*instr*
	agent	*pat/theme*	*loc*
	|	|	|
⟨	arg_1	arg_2	arg_3 ⟩
	[– o]	[– r]	[+ o]

Grammatical function mappings reveal that the two non-agentive participants compete for the primary object position. Although the primary object argument is privileged (can become a passive subject, is adjacent to the verb, and is available for long-distance extraction in Kichaga), Kichaga treats both objects in the same way with respect to object marking on the verb (Bresnan & Moshi 1993).

For comparison, the following diagram illustrates mapping options available in Chichewa:

(22)

	agent	*benef*	*pat/theme*
	agent	*instr*	*pat/theme*
	agent	*loc*	*pat/theme*
	~~*agent*~~	~~*pat/theme*~~	~~*benef*~~
	~~*agent*~~	~~*pat/theme*~~	~~*instr*~~[12]
	agent	*pat/theme*	*loc*
	|	|	|
⟨	arg_1	arg_2	arg_3 ⟩
	[– o]	[– r]	[+ o]

Within the model of LMT proposed here, languages with double object constructions which only employ pattern [3] can be analysed as imposing restrictions, or limitations, on their secondary object position ([+o]); for example, it can be inferred that in those languages this argument slot is considered unsuitable for the mapping of the beneficiary participant (whether a dative-shifted beneficiary as in English, or an applied beneficiary as in Chichewa).[13]

The LMT model offered here also supports the correct analysis of languages such as Kitharaka (Harford 1991; Alsina 1996a:679-683, who labels it 'alternating asymmetric'), whose applicative beneficiary construction has an alternating passive, but which does not allow both internal arguments to display any of the primary objective properties

[12] In a previous citation of this diagram, in Kibort (2007:263), I mistakenly left the mapping options indicated in this line as available in Chichewa. The present version of the diagram corrects that omission by crossing out the line.

[13] Additionally, since Chichewa is an asymmetric language, only its primary ([–r]) object is treated as an object with respect to object marking on the verb, and the secondary ([+o]) object cannot be 'dropped' (left unspecified) in the transitivised predicate. The latter restriction applies also to the secondary ([+o]) object in English, hence it may be a generalisation that applies regardless of whether the predicate has undergone applicative transitivisation or dative shift.

simultaneously. The proposed model concurs with the prediction formulated by Alsina (1996a:681) that '[i]f a construction allows two arguments to alternate as the passive subject (an alternating passive), it allows either of them freely to be represented by means of an object marker in the active form (an alternating object marker)'. In the proposed model, this correlation is straightforwardly captured by the fact that either of the participants in Kitharaka may map onto the primary object position and, while in this position, it displays all the primary object properties. Kitharaka differs from Kichaga in that, in the former language but not in the latter, the classical Bantu object properties are restricted only to the argument in the primary object (arg_2) position.

Before concluding this section, it is important to note the consequences of the proposed analysis of ditransitives for the Asymmetrical Object Parameter mechanism in mainstream LFG (Alsina & Mchombo 1988; Bresnan & Moshi 1990/1993). The AOP was proposed to handle the differences in the observed patterns of passivisability and object marking between asymmetric non-alternating languages like Chicheŵa and symmetric alternating languages like Kichaga. Specifically, it is argued that the AOP, which regulates the occurrence of argument structures with two unrestricted [–r] arguments, is present in asymmetric languages, but lacking in symmetric languages. On the analysis offered here, there is no need for the AOP because the particular options of grammatical function mappings that the parameter was designed to regulate are already achieved by the more general, and independently motivated, principles which are at work at argument structure. Specifically, while alternating languages can be defined simply as those which allow both their applied participant and their patient/theme to be mapped onto either of the object argument positions ([–r] or [+o]), symmetric languages can be defined as those which, under specific circumstances, allow both of their objective arguments (the primary and the secondary object) to display properties of objects other than passivisability. Not having a constraint such as the AOP is desirable, since the consecutive pre-specification of two arguments as [–r] should not be ruled out in principle: transitive unaccusatives such as 'cost', 'last', 'weigh' etc. are best analysed as having both their core arguments pre-specified as [–r] (as was first proposed, in different terminology but the same spirit, in Relational Grammar, see for example Perlmutter & Postal 1984:98-99), cf. *The book cost £10*, but **£10 was/were cost by the book.* Considering arguments other than the two internal ones, the parameter holds vacuously if it is understood as following from the fixed order of argument positions: only arg_1 and arg_2 may be pre-specified as [–r], but no other argument may receive this pre-specification. In other words, the valency template already specifies that it is not possible for there to be any doubling of [–r] arguments except when it occurs in the set of arguments in the first and second positions.

5.4 Multiple applicatives

In some languages, the transitivising 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] (which is in accordance with all widely used versions of LMT), and the grammatical function mapped onto this argument will be OBJ_θ. The two secondary objects will be distinguished by their subscripts.

6 Conclusions

The proposed model of ditransitive constructions solves the hidden problems of previous

proposals, captures the special morphosyntactic status of the 'third structural position' (the dative), and unifies the analyses of the non-derived dative, dative shift, and constructions with applied beneficiaries.

It also allows a systematic classification of languages depending on the patterns they employ for the expression of their beneficiaries. The options represented through the three argument structure patterns help make sense even of systems with mixed strategies for making ditransitives. For example, we find interesting languages such as Kanuri (Hutchison 1981; cited in Bresnan 2003, and Bresnan & Nikitina 2003/2007) which uses the transitivising applicative for all verbs except the verb 'give'; however, for the verb 'give', the non-applied pattern [1] is used when the beneficiary is 3rd person, and the non-applied patterns [2] and [3] are used when the beneficiary is 1st or 2nd person.[14]

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[14] The person split in Kanuri (crosslinguistically not uncommon, see e.g. Siewierska 2004:5-8, 148-151) affects the coding of arguments in other Kanuri constructions, too.

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